

# BOOK OF ABSTRACTS



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# KEYNOTE SPEAKERS

## **The Contextualization of Well-Being Research: Conceptual and Empirical Challenges**

*Antonella Delle Fave*

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The impressive expansion of knowledge in the well-being domain has opened several avenues of conceptual speculation and empirical investigation, leading to the current lack of consensus on which variables could be the ideal and most reliable indicators of well-being. Contributions from different disciplines have further expanded the field of knowledge and exploration, highlighting the plurality of individual and contextual dimensions that should be taken into account in order to provide an exhaustive representation of the construct. This complexity raises a major question: is it possible to consider well-being a universally structured concept, characterized by clearly defined and recurrent dimensions? Or would it be more realistic to differentially describe and measure well-being, according to the contexts in which it is investigated? Evidence derived from studies conducted in diverse environments such as nations, cultures, or workplaces, and in diverse individual conditions related to age, health, education or income suggest a much more articulated picture, still awaiting to be captured by researchers, and requiring a multi-method, interdisciplinary and intercultural approach.

## **The Form and Function of Positivity Resonance in Marital Conflict**

*Barbara L. Fredrickson*

Department of Psychology and Neuroscience, University of North Carolina, Chapel Hill, United States,  
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In this presentation, Dr. Fredrickson describes her most recent evidence to support Positivity Resonance Theory. Positivity Resonance is a form of positive interpersonal connection defined by three momentary and intertwined features: shared positive affect, mutual care and concern, and behavioral and biological synchrony. The theorized functions of positivity resonance are to build social bonds as well as mental and physical health. Drawing on rich, longitudinal data on midlife and older married couples, Dr. Fredrickson and her collaborators at UC Berkeley have created new tools to assess moments of positivity resonance, even in the midst of marital conflict.

## **Celebrating Complexity: The Turn to Qualitative Inquiry in Positive Psychology**

*Kate Hefferon*

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Qualitative inquiry has had a rich and colourful history within the psychological sciences. Utilising an array of inclusive, culturally and politically sensitive designs, qualitative research can offer psychologists the opportunity to gain an enhanced and situated understanding of their chosen areas of interest. However, up until recently (e.g. Hefferon, Ashfield, Waters and Synard, 2017), this approach has largely been neglected within the field of positive psychology. This session aims to highlight the importance of embracing diverse epistemological and methodological approaches when attempting to understand complex positive psychological concepts. More specifically, the session will critically reflect upon the historical and contemporary contributions of qualitative inquiry as well as the role that qualitative research can play in the development of the positive psychology field.

## **Second Wave Positive Psychology: Embracing the Dark Side of Life**

*Itai Ivztan*

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What is the first image that comes to our mind when positive psychology (PP) is mentioned? For most of us, it is the smiley emoticon. This symbol of happiness, optimism and joy reflects the way PP is commonly conceived and portrayed, both within the PP discipline and in society at large. As such, whatever is labelled as ‘negative’ is frequently rejected and considered to be outside the sphere of PP. But this could not be farther from the truth. In fact, PP investigates and researches some of the most difficult and painful human experiences. This talk explores a variety of topics that could be regarded as part of the ‘dark side’ of life, and emphasises the role they play in the positive aspect of our functioning and transformation as human beings.

The ‘dark side’ refers to challenging experiences, thoughts, emotions and behaviours, which trigger discomfort in us. Such discomfort is frequently avoided, as it involves an engagement with fear, pain, distress or confusion. However, engaging with the challenge and discomfort has great potential for growth, healing, insight and transformation. In other words, the ‘dark side’ contains the seed for a potential positive outcome, even when the path towards this outcome is testing.

I would like students and other people who are interested in this field to feel they are allowed to include the aspects of life - which we might call ‘negative’ - in their PP experience. Moreover, it is important to stress that these aspects of life are frequently *necessary* for the experience of growth and flourishing to be complete. To achieve this, I describe in this talk

the current state of affairs in the field of PP, with a view to dispelling the myth of its 'positivity'. People believe that PP involves only the positive, because they confuse experiences with outcomes. Indeed, the outcomes of PP theory and research are always positive in some way; however, the paths, the journey, what we experience on the way to these outcomes may be 'negative' and challenging. Second-wave PP recognises and acknowledges this journey, enabling the broadening of PP boundaries to embrace both 'positive' and 'negative' in our experience of flourishing.

## **Flourishing through Transitions: How Positive Psychology Promotes Sustainable Change for Individuals and Communities**

*Hans Henrik Knoop*

Associate Professor with Distinction, Department of Education (DPU), Aarhus University,  
Extraordinary Professor, North-West University, South Africa

The world is changing with or without us. And like all life, through evolution our species are adapted genetically to this. The special endowments of humans include intelligence and emotions, as capacities to change by learning, creating and collaborating at a level beyond any other known lifeform on Earth. Change is not only a universal, environmental condition. It is in our own nature to change in order to feel alive. We habituate; thus, no change equals no experience. Every conceivable satisfaction precludes motivation for change. From the smallest things, like satisfying thirst or browsing the internet, to every dream of improving the world. No change, no fun.

So why do people so often resist change? The general, psychological answers include anxiety (too much change already) and lack of meaning (pointless change for no good). People who are already overwhelmed seek stability before they seek further change. And people who do not find change meaningful will work to avoid it.

A key question thus becomes, how we can think, act and organize in ways that make for interesting, life-confirming, psychologically sustainable, ecological change? Change that does not undermine the viability and vitality of individuals, nor of communities? Is it even possible?

Today, along with related fields of inquiry, Positive Psychology contributes in answering these questions, across domains and at scales that go far beyond what psychology has traditionally been concerned with. It now informs and inspires economy, politics, journalism, education, health, countless workplaces and other human fora, and it is our academic and professional duty to do what we can to ensure that it is all for the better.

In this keynote address, Hans Henrik Knoop offers an overview of how insights from Positive Psychology may be applied in education, work life and journalism in ways that may avoid many of the predictable barriers against it forwarded by professional interest groups, traditional dogma and bureaucracies. This is exemplified by three national studies on well-being (Knoop, Holstein, Viskum & Moon, 2016, 2017, 2018) in Danish schools, focused on boredom, community and optimism, each based on data from more than a quarter million pupils.

## **“Character Strengths Use without Mindfulness is Hollow, while Mindfulness without Character Strengths is Impossible”**

*Ryan Niemiec*

VIA Institute on Character, United States, e-mail: [ryan@viacharacter.org](mailto:ryan@viacharacter.org)

The science of mindfulness and the science of character strengths are each substantially on the rise with strong findings over the last decade and a half. And, the practice of each has captured the enthusiasm and filled the toolboxes of many practitioners across the globe. The integration of mindfulness and character strengths is a newer domain of exploration and practice. Two central types of integration have been theorized: strong mindfulness and mindful strengths use. The former involves the use of character strengths to enhance adherence to meditation practice, to overcome mindfulness obstacles, to infuse energy and interest in mindful living, and to create greater authenticity with one’s mindfulness practice. The latter, mindful strengths use, refers to the ways mindfulness and mindful living practice can enhance the expression of character strengths such as building signature strengths, balancing character strengths overuse and underuse, assisting in strengths expression that is context-sensitive and individualized, and boosting strengths-spotting and strengths appreciating. Mindfulness-based strengths practice (MBSP), one of the first mindfulness program to target what’s best in human beings rather than to target the amelioration of symptoms, will be discussed. Pilot data on the program are promising.

## **Work Engagement – Occupational Health Psychology in the 21<sup>st</sup> Century**

*Wilmar B. Schaufeli*

University of Leuven, Belgium & Utrecht University, The Netherlands, e-mail: [w.schaufeli@uu.nl](mailto:w.schaufeli@uu.nl)

Our world of work is in transition, not only because of globalization and rapid technological change, but also because employee’s mental capital and soft skills are of increasing importance in most jobs. As a matter of fact there is a trend towards a ‘psychologization’ of work. This means that today’s companies focus more on employee engagement than on mere job satisfaction or occupational health as they did in the past. Simultaneously, the science of positive psychology emerged, which is about optimal human functioning instead of fixing what is broken as is the case in traditional psychology. Since the turn of the century occupational health psychology boasts a body of knowledge about work engagement. In this invited address the concept of work engagement is discussed, and a state-of-the art overview is presented of research findings on the topic. From this, it appears that work engagement is not only good for employees, but also for organizations they work for. Attention is given to interventions to promote work engagement, both at the individual as well as the organizational level. By doing so the practical relevance of work engagement is illustrated for a 21<sup>st</sup> century positive occupational health psychology.

**Bio**

Lea Waters PhD is an Australian academic, researcher, psychologist, author and speaker who specializes in positive education, parenting and organizations.

Professor Waters is the Founding Director and Inaugural Gerry Higgins Chair in Positive Psychology at the Centre for Positive Psychology, University of Melbourne where she has held an academic position for 22 years. Lea holds affiliate positions at Cambridge University's Well-Being Institute and the University of Michigan's Center for Positive Organizations. As a researcher, she has published over 100 scientific articles and book chapters.

Lea is the 2017-2019 President of the International Positive Psychology Association and serves on the Council of Happiness and Education for the World Happiness Council.

Her book, *The Strength Switch: How The New Science of Strength-Based Parenting Can Help Your Child and Your Teen to Flourish*, was the top release on Amazon in the parenting category and was listed in Top reads for 2017 by Berkley University's Greater Good Centre. It is being translated Chinese, Japanese, Korean, Hungarian, Arabic and French.

Lea's work has been featured in global media such the Wall Street Journal, [TIME.com](http://TIME.com) Magazine, The Washington Post, The Atlantic and Live Happy Magazine.

Lea's TEDx talk, *Warning: Being positive is not for the faint hearted!*, explores how, with small positive steps, we can make a huge impact on our wellbeing.

In 2015, Professor Waters was listed as one of Australia's Top 100 Women of Influence by the Financial Review and Westpac Bank. She has been listed in the Marques 'Who's Who in the World' since 2009 and has been included in the 2017 edition of Who's Who of Australian Women.

Lea is the Director/Co-Director of four education programs and projects: [Positive Detective](#), Visible Wellbeing, the Strength Switch and the Strengths Exchange, supporting the wellbeing of schools and families world-wide.

## **The Strength Switch: Science, Stories and Strategies to Help Students Thrive**

*Lea Waters*

University of Melbourne, Melbourne Graduate School of Education, Australia

The Strength Switch combines the research of Professor Lea Waters on strength-based parenting and teaching with three decades of research from strength-based science and positive psychology. In this talk, Professor Waters will show the positive benefits of flicking our strength switch and building on children's strengths before we correct their weaknesses. She will showcase her science and point the audience to useful tools and practices. The Strength Switch is an approach suitable for parents, teachers, school counselors and mental health practitioners working with young people and families.



# SYMPOSIA

## Invited Symposium

1207

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### *Playing Positive Psychology: Using Tangible Tools and Facilitation Methods in Positive Psychology Coaching and Organisational Training*

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**Chair:** *Ilona Boniwell*<sup>1</sup>

**Presenters:** *Lucy Ryan*<sup>2</sup>, *Sue Langley*<sup>3</sup>, *Mads Bab*<sup>4</sup>

<sup>1</sup>[https://www.positran.fr/en/sujet-3152-about\\_dr\\_ilona\\_boniwell.html](https://www.positran.fr/en/sujet-3152-about_dr_ilona_boniwell.html)

<sup>2</sup><https://mindspring.uk.com/the-team/lucy-ryan/>

<sup>3</sup><http://suelangley.com/sue-langley/>

<sup>4</sup>[http://www.gnist.com/om\\_gnist/mads-bab/](http://www.gnist.com/om_gnist/mads-bab/)

Over the past few years, the notion of a “positive intervention” has risen to prominence, as it was discovered that certain intentional actions can be effective in increasing and sustaining happiness and other positive states, as well as in reducing depression and anxiety. Despite the evidence for their effectiveness, these interventions are not widely accepted in the organisational and/or coaching domains, often seen as too “fluffy” and removed from the realities of day-to-day business. The symposium will focus on the theory and emerging evidence behind using more pragmatic tangible tools and facilitation methods in positive psychology coaching and training to communicate positive psychology concepts and solutions to the business and professional audience.

Research demonstrates that recipients of positive psychology, whether in training or coaching, are wanting to understanding the science, but equally need that science to be accessible. ‘Talk my Language’ is a strong theme from learners who thrive when empowered to receive in the science in kinaesthetic and visual ways. Lucy Ryan (UK) will present a business case study of helping a UK company survive - and thrive - through change through working with a positive psychology ‘toolkit’.

Handling emotions is a key skill for leaders in the future, according to the World Economic Forum. Sue Langley (Australia) will discuss how leaders’ emotional intelligence can be developed through the application of tangible tools, such as emotion and resilience cards.

Lego Serious Play provides a tangible method to apply positive psychology interventions through use of Lego model building. Mads Bab (Denmark) will explore how individuals and groups use metaphors and narratives to express deeper held thoughts and arrive to shared meaning. This method offers coaches and facilitators a framework that fits with their existing positive psychology toolbox and know how.

Finally, Ilona Boniwell (France, UK) will bring multiple threads together into a coherent framework and discuss recent research into the effectiveness of tangible interventions.

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**Invited Symposium**

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1152

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***Health and Well-being in the Digital Era: Socio-ecological Perspectives***

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**Organizers:** *Márta Csabai, Tamás Martos*

Institute of Psychology, University of Szeged, Hungary

The last few decades have brought promising developments in the application of the bio-psycho-social approach in the integrated care models of healthcare. There is a growing need that the traditional medical view of diseases and their treatment should be gradually replaced by the emphasis on health promotion and a more democratic concept of provider-client interactions. These developments are partly facilitated by the fast increase and availability of (digital) health information, and the need for the extension of the health-illness spectrum by the dimension of general well-being. The invited papers of the symposium critically reflect on these developments and the challenges brought by them. Marta Bassi (Italy) will present a working model of integrated care, the Care System Group, a research team comprising psychologists and physicians from nine centers in Northern, Central and Southern Italy. Peter Schulz (Switzerland) will demonstrate how on one side the availability of digital information influences patients' information search, but also the challenges for patient empowerment and autonomy. The problems of patient autonomy and empowerment are critically reflected by Sara Kim (US), who will address the question of psychological safety in relation to speaking up and power dynamics in healthcare. The complex, bio-psycho-social view of health and well-being is enlightened in the systems theory approach by Tamas Martos and Viola Sallay (HU), emphasizing the transactional processes between individuals and their personal niches and the relevance of these processes to health outcomes.

## PRESENTATION 1

### The Care System Approach to Well-being: Giving Voice to Patients, Caregivers and Health Professionals

*Marta Bassi<sup>1\*</sup>, Sabina Cilia<sup>2</sup>, Monica Falautano<sup>3</sup>, Monica Grobberio<sup>4</sup>, Claudia Niccolai<sup>5</sup>, Marianna Pattini<sup>6</sup>, Erika Pietrolongo<sup>7</sup>, Maria Esmeralda Quartuccio<sup>8</sup>, Rosa Gemma Viterbo<sup>9</sup>, Beatrice Allegrì<sup>6</sup>, Maria Pia Amato<sup>5</sup>, Giovanna De Luca<sup>7</sup>, Claudio Gasperini<sup>8</sup>, Miriam Benin<sup>4</sup>, Eleonora Minacapelli<sup>3</sup>, Francesco Patti<sup>2</sup>, Maria Trojano<sup>9</sup>, Antonella Delle Fave<sup>10</sup>*

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<sup>10</sup>Department of Pathophysiology and Transplantation, University of Milan, Milan, Italy

**Keywords:** well-being, patients, caregivers, health professionals, multiple sclerosis

It was April 6 1948 when the WHO formalized the current definition of health as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity. Over the last 70 years an impressive amount of theoretical and research efforts has been invested in the development and implementation of this definition. Four major advancements were achieved: (1) A paradigm shift from the bio-medical view of human functioning towards a bio-psycho-social, person-centered model; (2) A comprehensive map of ill-being and well-being dimensions contextualized in the manifold human life domains, including health; (3) A broadening of attention to all the characters involved in the care system, based on the acknowledgement of the interconnections among patients', caregivers' and health professionals' psychophysical health; (4) An increase in the studies adopting a mixed method approach, that allows for a deeper understanding of individuals' needs and resources, in line with the person-centered model.

Based on these achievements, the major challenge currently faced by researchers and practitioners is the integration of all these aspects into a unified model of health, guiding the development of virtuous care systems. Our presentation illustrates a research and clinical approach developed to meet this challenge by the Care System Group, a research team comprising psychologists and physicians from nine centers in Northern, Central and Southern Italy. This approach was operationalized through two subsequent projects, supported by the Italian Multiple Sclerosis Foundation (FISM), and involving persons with multiple sclerosis (PwMS), their caregivers and health professionals. Major findings obtained from the pilot project conducted in 2011 will be first presented [1-3], followed by preliminary results from

the main 3-year project (2015-2018), derived from the application of Leventhal's Common Sense Model to the experience of PwMS. Overall, these findings suggest the potential of an integrated approach to health in revealing the coexistence of illness and ill-being with psychological and contextual resources, which can counterbalance health-related constraints and foster the construction of a balanced and harmonious life. Discussion will focus on the current attempts to translate research findings into clinical practice. As illness exacts a heavy price from individuals, families, healthcare systems and societies as a whole, well-being promotion can benefit individuals in their process of adjustment to chronic conditions, as well as societies through the implementation of economically sustainable healthcare strategies. Moreover, findings obtained in the domain of multiple sclerosis can represent a touchstone for addressing the challenges posed by other chronic illnesses.

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## PRESENTATION 2

# Psychological Safety: A Missing Component in Empowering Healthcare Professionals' Speaking Up Skills

*Sara Kim*<sup>1\*</sup>, *Naike Bochatay*<sup>2</sup>, *Nadia Bajwa*<sup>3</sup>

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**Keywords:** healthcare, power, hierarchy, speaking up

*Background:* Patient safety is incumbent on healthcare professionals' ability to voice concern when recognizing mistakes or judgment lapses in others. Speaking up depends on activation of motivation and on timely and effective articulation of one's concerns. What makes speaking up challenging in healthcare is the power structure that inhibits those in lower positions from raising patient safety concerns to those with more authority. Educational programs promoting speaking up skills development serve an important function in ensuring patient safety.

*Aim:* We examined both the types of interventions reported in the literature that focused on healthcare professionals' speaking up motivations and skills and the conceptual frameworks of power hierarchy guiding the studies. [1]

*Method:* A scoping literature review was conducted. Out of 4,002 articles identified from databases (e.g., PubMed, CINAHL, EMBASE, PsychINFO, Web of Science, Business Source Complete), 91 articles were screened by a team of clinicians and educators, resulting in 10 articles that reported educational interventions targeting speaking up skills.

*Results:* Formal conceptual frameworks of power dynamics were largely absent from the reviewed studies. Interventional educational strategies included workshops that incorporated real-life vignettes and simulations of team dynamics in operating rooms. Speaking up behaviors in subjects of lower power status (i.e. nurses, junior physicians) were observed during their interactions with confederates of various statuses. These confederates were trained to demonstrate encouraging behaviors ('Your opinion is important'), or discouraging behaviors ('Do what I say'). Other variables were openness (i.e. empathetic) vs. strictness (i.e. unfriendly expressions), or hierarchical (i.e. short, dismissive responses) vs. non-hierarchical (i.e. use of first names). Interventions promoted the use of models such as advocacy-inquiry in the context of speaking up. Mixed findings reported in the studies make it difficult to fully assess the effectiveness of the interventions.

*Conclusion:* Given the deeply rooted nature of power dynamics in healthcare, it is curious that this topic remains an underexplored research inquiry. The current studies exclusively target individuals' verbal skills and lack rigorous theoretical grounding. Organizational psychology or business may offer paths for future research. For example, psychological safety provides the most relevant foundation for further examining how speaking up motivations and behaviors are influenced by perceived power distance, leader inclusivity, and individual empowerment.[3] Constructs such as courage, risk taking, resilience, and trust become im-

portant dimensions in understanding behaviors of those in lower power status. Moreover, research and educational efforts should also focus on the behaviors of those in power positions that foster active listening and furthermore, a culture of safety for all.

### **Acknowledgments**

We acknowledge the funding support by the Arnold P. Gold Foundation in the United States.

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### PRESENTATION 3

## **„Health Consumerism in The Digital Age: The Changing Role of Patients’ Autonomy and Empowerment”**

*Peter J. Schulz*

Institute of Communication & Health, University of Lugano, Switzerland

During the past decades, the Internet has evolved to become a necessity in our daily lives. The selection and sorting algorithms of search engines exert tremendous influence over the global spread of information and other communication processes. In the area of healthcare, the Internet alone makes available to consumers vast amounts of information and provides the potential for the “democratization of healthcare”.

This progress, however, goes along with a couple of drawbacks in the process of health information search. The talk will demonstrate how on one side the availability of health information influences patients’ information search, and changes, more broadly, patients’ understanding of his or her autonomy and empowerment. It will discuss challenges that are entirely part of the online health information seeking process.

## PRESENTATION 4

**Personal Niches – How We Promote Our Health and Well-Being by Places and Relationships***Tamás Martos<sup>1\*</sup>, Viola Sallay<sup>1</sup>*

Institute of Psychology, University of Szeged, Szeged, Hungary,  
 \*e-mail: martos.m.tamas@gmail.com

**Keywords:** health, well-being, personal niches, personal projects, dyadic coping, home environment, chronic disease

*Background:* Recent cultural and technological changes provide new health related opportunities but also new challenges for the individuals along their life course. Experiences of an ageing society, forms of new IT based technologies and internet based information systems, changing role expectancies in healthcare increase the importance of individual agency in health related issues and the role of the individual as an author of their health life course. At the same time, health related individual agency is context dependent – it is embedded in concrete socioecological realities. Niche construction theory may provide a theoretical frame to understand the complex relationships between individuals and their sociological context.

*Aim:* We provide a theoretical overview and framework of the Personal Niche Construction Model and its application to health related strivings and behaviour. Personal niche refers to an integrated set of life conditions that provide specific environment for the growth and life of an individual, organized in space and time. Niche construction may involve several interrelated and interacting domains:

- ecological aspects – biological environment of landscapes, plants and animals;
- technological aspects – the construction of artefacts, tools, buildings, technological systems;
- social aspects – relationships, communities, institutions;
- symbolic aspects – construction of symbolic spaces and information systems including language, meaning systems, practices of knowledge sharing, learning and information transmission.

*Method and Results:* We present relevant research approaches with a joint emphasis on a) the transactional processes between individuals and their personal niches and b) the relevance of these processes to health outcomes. Two lines of research are presented. Relationships with close others provide a proximal context for health and well-being. The study of personal projects in the context of committed partnerships shows that relationship patterns of giving and receiving support as well as patterns of asking and providing dyadic coping efforts are in relation with health related outcomes. Moreover, homes and home environments are among the most universal examples of personal niches that are deeply connected to healthy functioning. We exemplify our approach using excerpts from a qualitative study on home related self-regulation processes of people living with chronic illness and their family members.

*Conclusions:* The focus on niche construction processes provides an ecologically valid approach to the understanding of health related agency of individuals. Potential directions for further research are discussed with an emphasis on new technologies and healthcare settings.



## **Invited Symposium**

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### ***Positiv Society (Public Health and Positiv Psychology)***

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#### **Examples from Two of the Healthiest and Happiest Countries in the World**

**Organizers:** *Dora Gudrun Gudmundsdottir*

Directorate of Health, Iceland

**Speakers:** *Dora Gudrun Gudmundsdottir*<sup>1</sup>, *Ragnhild Bang Nes*<sup>2</sup>, *Sigrun Danielsdóttir*<sup>1</sup>, *Solveig Karlsdóttir*<sup>1</sup>

<sup>1</sup>Reykjavik, Iceland

<sup>2</sup>Oslo, Norway

One of the aim of positive psychology is to contribute to building and sustaining positive societies. A positive society is where people are feeling well and functioning well, in other words, where people flourish. In order to enhance wellbeing of a population, it is important to have reliable measures of population mental wellbeing and monitor it regularly. It is also important to have a structured approach for enhancing wellbeing with a whole of a society approach for wellbeing as well as using evidence-based interventions that can improve mental wellbeing throughout the life course. The aim of this symposium is to present some examples from Iceland and Norway, two of the most healthy and happy countries in the world, regarding the development of wellbeing measures on a national level and how these measures have been linked with public policies. Furthermore, to present a whole of a society approach to wellbeing in Iceland called health-promoting society – wellbeing for all. This approach does cover the whole life course from health promoting preschools, primary schools, secondary schools, work places as well as health and wellbeing promotion for the elderly.

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## PRESENTATION 1

### **The Icelandic Whole-of Society Approach to Promote Health and Wellbeing for All**

*Dora Gudrun Gudmundsdottir*<sup>1</sup>

<sup>1</sup>Directorate of Health in Iceland, Reykjavik, Iceland, email: dora@landlaeknir.is

*Background:* Positive aspects of health and the matters of happiness and wellbeing have been raised in policymaking. WHO, OECD, UN and EU have encouraged countries to focus on happiness and wellbeing, to develop reliable measures on wellbeing and collect populations data as well as to develop actions to increase health and wellbeing.

*Aims:* The aim of this presentation is to present the Icelandic whole of a society approach to wellbeing, health promoting community – wellbeing for all. Examples from Iceland regarding monitoring wellbeing and quality of life on a national level will be presented as well as how wellbeing measures have been linked with public policies and presented to the public through public health indicators.

*Methods:* Analysing the impact of measuring mental wellbeing on population level on public policies. Furthermore to analyse how to present happiness and wellbeing data to the public through public health indicators.

*Results:* Starting to measure wellbeing on a national level had an impact on public policy outcomes. Analysing happiness and wellbeing data on local community level increased the interest in becoming a health promoting community. Now over 80% of Icelander live in a health promoting community.

*Conclusion:* We conclude that it is important to measure wellbeing on a national level to put wellbeing on the agenda in public policies. To have an impact on the local community level is also important to analyse the data on a local community level and present it to the public.

## PRESENTATION 2

### A Strategy for Monitoring Quality of Life in Norway

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*Background:* National governments and major international institutions are increasingly using indicators on quality of life (QoL) to inform public policy and monitor social progress. In this presentation, we introduce a new strategy for monitoring QoL in Norway.

Norway's national registries provide rich objective data on QoL-relevant factors to this aim, but do not include subjective information on wellbeing and thriving in the population. Combination of objective and subjective data clearly adds value to both types of data and provide a unique platform for informed policy planning.

*Aim and method:* In 2015, the Ministry of Health commissioned the Directorate of Health to create a strategy to ensure good data on population QoL. The main purpose was to advise the Ministry of Health, and other central government institutions, on how to proceed to obtain, analyze and disseminate information on the development and distribution of QoL in Norway.

*Results:* The resulting report (2016) recommended: 1) coordination of measurement tools and methods, 2) substantial improvements in the national data collection system, 3) a system for collecting data on county and municipal QoL as the political leadership in the local communities is responsible for monitoring health and QoL, and 4) a national site for QoL information. Building on these recommendations, and particularly addressing the need for coordination of measurement tools and improvements in data collection, a new measurement strategy was published in March 2018. An overview of this new strategy, including choice of definition, theoretical perspective, and specific measures, will be presented.

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### PRESENTATION 3

## Increasing Mental Wellbeing Through Health Promoting School Projects in Iceland

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*Background:* The Directorate of Health in Iceland organizes holistic approaches to promoting health and wellbeing via Health Promoting Schools and Health Promoting Communities.

*Aim:* The aim of this presentation is to introduce the mental wellbeing part of the health promoting schools in Iceland in particular.

*Methods:* The Health Promoting School projects in Iceland have been implemented for preschools, secondary and primary schools. These projects are long-term in nature and apply the whole school approach, which involves students, parents, and the surrounding community, as well as teachers and all staff at the school.

In 2011, health and wellbeing became one of six pillars of education in the Icelandic government's edition of a new curriculum for all school levels. Those foundations are intended to permeate all school activities and education. The Ministry of Education, Science and Culture promotes the Health Promoting School projects in their publications, as a suggested means towards success in the health and wellbeing foundation.

*Results:* The main themes for the health promoting schools are nutrition, physical activity, mental health and life skills. Schools are provided with a handbook with guidelines, checklists and toolkit and receive guidance and support from The Directorate of Health. In these approaches pre-, primary and secondary schools are guided in adopting indicators of effective practice in mental health promotion throughout the life course.

*Conclusion:* When health and wellbeing became one of the six pillars of education in Iceland that facilitated the work of mental health promotion in the schools.

## PRESENTATION 4

### Prevalence of Happiness and Substance abuse among Icelandic Adolescents

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*Background:* Iceland went through sever economic crisis in 2008 when whole of the banking system collapsed. Macroeconomic downturns have been associated with a decrease in happiness among adults. In Iceland, substance abuse among adolescents has been radically cut in the past 20 years.

*Aims:* The aim of this presentation is to look at trends in happiness and substance abuse among adolescents through times of economic changes in Iceland. Also to present the impact of a comprehensive universal interventions, which has grown out of collaboration between policy makers, behavioural scientists, field based practitioners and community residents in Iceland.

*Methods:* The data used in this study comes from series of population-based surveys of Icelandic adolescents representing around 85% of all 15-year-old adolescents in Iceland each year of measuring.

*Results:* The prevalence of happiness was 85% in 2000 compared to 90% in 2010 despite the economic crisis and then down to 84% again 2016. The prevalence of substance abuse was 42% in 1998 compared to 5% in 2016. An increase in time spent with parents was detected during these periods as well.

*Conclusion:* An overall increase in time spent with parents was detected which might explain the increase in adolescents' happiness and the decrease in their substance abuse. These results indicate that good relations with parents may protect adolescents from possible negative effect of a national economic crisis. Furthermore, they show us that it is possible to reduce substance use nationally among adolescents by capitalizing on opportunities on several community levels.

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## Invited Symposium

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1117

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### *New Directions in the Psychology of Optimal Experience*

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**Chair:** *László Harmat***Flow Experience in Music: Practice and Performance***László Harmat*<sup>1</sup>\*, *Örjan De Manzano*<sup>2</sup>, *Fredrik Ullén*<sup>2</sup><sup>1</sup>Department of Psychology, Linnaeus University, Växjö, Sweden<sup>2</sup>Department of Neuroscience, Karolinska Institute, Stockholm, Sweden

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**Keywords:** flow, emotion, individual differences, psychophysiology, music

*Background:* It is not unusual to experience flow during musical activities. [1]. Csíkszentmihályi theorized music is an activity in which it is easier to reach an experience of flow because music can sustain people's intrinsic motivation [2].

*Aim:* Our aims to discuss the literature about flow experience during musical activities in relation to expertise, individual and group performances. In addition, we will introduce some new directions and our undergoing researches regarding this field.

*Method:* We review studies using qualitative and quantitative research methods to assess "state" and "trait" flow experiences in relation to music performance, practice and musical composition.

*Results:* A considerable amount of literature has been published on the experience of flow in music [3, 4]. Most of the studies focus on the investigation of "state" and "trait" flow in individual performers but there is a growing interest in to study flow experience during group performances. These explorative studies aimed to discover the unique characteristics of the group flow experiences in musical bands [5]

*Conclusions:* There is a need for studies that address experimental and longitudinal perspectives toward flow in musical context. It is also future challenge for research in this field to analyze flow in musical setting from a group perspective.

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## The Occupational Requirement of Thinking Creatively is Associated With Flow Proneness During Work: Genetic and Environmental Influences

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**Keywords:** flow, creativity, twin modeling

*Background:* Flow is the subjective experience of high but effortless attention, loss of self-awareness, control, and enjoyment that can occur during active performance of challenging tasks. Both qualitative and quantitative research suggest a relation between the proneness to experience flow and creative work [1, 2].

*Aim:* To investigate the phenotypic relation between the occupational requirement/importance of creative thinking and flow proneness during work.

*Method:* Data were collected from a twin cohort part of the Swedish Twin Registry [3]. The present sample consisted of 9,052 twins (age range 27 – 54 years,  $M = 41 \pm 7.7$  years; 5226 female), with information on zygosity. The O\*NET taxonomy was used to infer the importance of creative thinking for all occupations listed by the participants. The participants also rated to what extent their work was associated with flow experiences. The phenotypic relation between ‘Thinking creatively’ and ‘Flow at work’ was analyzed using a general linear model, adjusting for age and sex. The genetic and environmental influences on that relation were analyzed using structural equation modeling, based on 1,142 complete twin pairs and 978 singletons.

*Results:* There was a significant association between ‘Thinking creatively’ and ‘Flow at work’  $F_{(7223)} = 12.7, p < .001$ . The univariate heritability was 34% and 31% for the two variables respectively; 86% of the phenotypic relation was accounted for by genetic factors; 31% of the total genetic variance in the two traits was shared.

*Conclusions:* Individuals who hold an occupation which requires them to think creatively also report more flow during work. While creative work and related environments may fulfill many conditions for flow, the association appears to be predominantly genetic, suggesting that flow proneness is associated to an interest in creative professions through common genetic factors.

### Acknowledgments

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## Flow Synchronization: the Dynamics of Flow in a Challenging Interactive Activity

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**Keywords:** flow, flow synchronization, social, interactive, coordination

*Background:* Flow is a subjective experience (Csikszentmihalyi, 1975), but studies based on interview technique or experience sampling method suggest that social interactions can be the sources of flow experience (Csikszentmihalyi & Hunter, 2003; Delle Fave, 2009). There have been different concepts to describe flow in social contexts – e. g. shared flow (Csikszentmihalyi & Selega Csikszentmihalyi, 1988), social flow (Walker, 2010), group flow (Sawyer, 2008) –, which highlight the comprehensive quality of this experience (Walker, 2010). Theories about the coordination dynamics of interactions – e. g. emotional contagion (Hatfield, Cacioppo, & Rapson, 1994), crossover of states/experiences (Westman, 2013), social coordination (Ackerman & Bargh, 2010) – emphasize the automatic synchronization of emotional, behavioral and psychophysiological patterns, or mental states (like flow), and the increased value of the interpersonal experiences.

*Aim:* Based on the synchronization tendency of human interaction, we assume that this coordination can be observed in case of flow experience (Varga & Józsa, 2013), during a cooperative activity (Delaherche et al., 2012). In order to measure the dimensions of the related social interaction, we aimed to conceptualize and operationalize the possible phenomenon of flow synchronization (Magyaródi, Soltész, Mózes, Nagy, & Oláh, 2011).

*Method:* In the series of the studies (Magyaródi, 2016), our explorative aim was to focus on flow experience in social interactions with its possible antecedents and consequences, to get a coherent picture about this psychological phenomenon. We used experimental designs, interview and survey technique to be able to study the concept as wide as we can. We measured the experience of 6323 adult participants altogether (the mean age of the participants in the 6 studies: 25.56 years, SD = 8.76). The frequency of male and female participants in the 6 samples are the following: 36.15% male, 68.85% female.

*Results:* According to our results, the quality of flow experience in a social interaction is more intense, than in a solitary activity. We could observe the synchronization of the partners' optimal experiences during their common work. Flow experience is supported by the components of flow synchronization which are based on the nature of the interaction during the experience. Personality differences were found in flow proneness in social activities, and we identified personality characteristics which can be developed to become more disposed to experience flow in both solitary and social situations.

*Conclusions:* The experience of flow in a shared, cooperative activity may contribute to the fulfillment of the basic human needs, supporting the person to develop competences, to use social skills, to improve the quality of the relationships and well-being factors also, in both short and long terms, to promote the flourishing of individuals and social relationships.



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## An Overview of Flow-Research a Current Project of the EFRN

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**Keywords:** flow-experience, European Flow-Researchers Network, Scoping Review

*Background:* Flow “is a gratifying state of deep involvement and absorption that individuals report when facing a challenging activity and they perceive adequate abilities to cope with it” [1]. During flow, people are deeply motivated to persist in their activities and to perform such activities again [1, 2]. Since the introduction of the flow concept, there has been much research investigating the concept itself, its preconditions, and its consequences. This research shows: “flow experiences can have far-reaching implications in supporting individuals’ growth, by contributing both to personal well-being and full functioning in everyday life” [1].

*Aim:* In this presentation, members of the European Flow-Researchers Network aim at providing a comprehensive overview of flow-research in the new millennium.

*Method:* To develop this scoping review, we followed the steps proposed by Aksey and O’Malley (2005) [3]. For the literature research, we searched platforms *PsychInfo*, *PubMed*, *PubPsych*, *Web of Science* and *Scopus*. We searched for empirical studies using the terms “flow/optimal experience/challenge-skill balance” and “Csikszentmihalyi” and excluded “cerebral blood flow” and “work-flow centrality”. We included only empirical studies that were published between 2000 and 2016. Overall, we found 239 publications that were rated by the authors with respect to the relevance of that publication for our scoping review. Publications were included if they contained original data on flow experience. From the 239 publications, 177 articles were finally included in the review. Experts of each topic charted the information and then summarized results of the selected studies. Finally, experts discussed the results and implications for future research.

*Results:* To structure and review the empirical research regarding flow experiences, we developed a framework. The framework consists of three circles lying within each other, containing categories of flow-research: The inner circle represents individual factors. On this individual level, we distinguish between the categories personality, motivation, physiolo-

ogy, emotion, cognition and behaviour. The middle circle – the contextual level, represents the categories context and interindividual factors and the outer circle represents the cultural level. Within our framework, all categories contain preconditions or consequences of flow, and all categories can influence each other. Results of each category is reported in the contributions of this symposium. As a general result, we found a need for longitudinal and experimental studies in flow research.

*Conclusions:* Flow research in the new millennium has made huge progress in understanding the preconditions, components and consequence of flow on different levels. Our review provides a framework to cluster flow research and gives a systematic overview about existing studies and their findings in the field.

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## Overcoming Impediments to Team Flow

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**Keywords:** teams, groups, teamwork, team flow, optimal experience, flow, performance

*Background:* For most of us, teamwork constitutes an important and prominent part of our working lives. It would be wonderful if collaborations in the workplace could be filled with passion, trust, and synergy, such that team members act and flow as one and the possibilities seem endless and effortless. Unfortunately, the reality is too often teams' crumbling under the pressure of high performance expectations and team members engaging in destructive competition despite sharing the same purpose. Instead of synergy and positivity, team members experience burnout and stress.

*Aim:* With teamwork being so critical to organizational success, businesses are in urgent need of tools that can help alleviate these problems and create conditions for teams to thrive. Building on Csikszentmihalyi's research on flow [1], team flow is defined as a shared experience of flow during the execution of interdependent personal tasks that serve the interest of the team, originating from an optimized team dynamic and typified by seven prerequisites and four characteristics at the team level [2]. Despite the noted potential for team flow to enhance team performance, subjective well-being, and a healthy team dynamic, there are potential pitfalls that can inhibit team flow that have not yet been researched.

*Method:* To remedy this, we collected interview and focus group data from both student teams (365 students comprising 60 project teams) and business teams (263 professionals of 28 teams). The focus group consisted of a team of 20 mental health care professionals working in shifts.

*Results:* In our search for impediments to the experience of team flow, we have seen that many factors can impede team flow experiences. Prominent factors for the student project teams were related to accountability and motivational issues (co-worker laxity, disengagement), interpersonal issues within the process of collaboration (miscommunication, negativity, disagreement, conflict), task-related issues (ambiguity, disorganization, work pressure, lack of challenge) and environmental issues (distractions). The teams in professional organizations generally experience the same impediments to team flow, though dissatisfaction with the work itself appears less common. For them, key factors involved the lack of engagement and communication in terms of receiving timely and constructive feedback, slowness, and distrust. The mental healthcare team listed insecurity as its foremost impediment to team flow as they experienced a culture of harsh punishment for mistakes both within the team and in the surrounding organization. This shows that a sense of security, that the workplace is a safe place both in the physical and psychological sense, is an essential precondition for experiencing team flow.

*Conclusions:* Not surprisingly, all reasons given by the teams for their inability to experience team flow correspond closely with the prerequisites identified in the team flow theory [3]. Based on this research, we offer guidelines for preventing and/or overcoming these obstacles.

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## **Invited Symposium**

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### ***Translating Knowledge into Evidence-Based Practice: Illustrations of State-of-Art Positive Psychology Interventions and Ethical Guidelines***

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**Chair:** *Tayyab Rashid*

University of Toronto Scarborough, Canada

**Participants:**

1. *Carmelo Vazquez, Almudena Duque, Ivan Blanco, Teodoro Pascual, Natalia Poyato, Irene Lopez-Gomez, Covadonga Chaves, Gonzalo Hervas*
2. *Carmen Valiente, Regina Espinosa, Leticia Martinez, Alba Contreras, Almudena Truchartey, Covadonga Chavez*
3. *Linda Maria Furchtlehner, Anton-Rupert Laireiter, Tayyab Rashid*
4. *Tomas Lomas & Aaron Jarden*

**Symposium Abstract:**

Positive Clinical psychology strives to balance and integrate positives and negatives in meaningful and innovative ways to improve clinical effectiveness of clinical disorders. This premise is translated into three state-of-the-art studies, presented in this symposium. First, an eye-tracking study to promote healthy attentional bias in clinical depression is empirically tested with Cognitive Behaviour and Positive Psychology based interventions. Second, results of a 12-session group therapy based on self-serving bias of persecutory thinking and positive psychotherapy for psychosis, with the goal of improving a sense of self-enhancement, is presented. Third, results of a randomized controlled trial, comparing CBT with Positive Psychotherapy (PPT) are presented with outcome data on well-being, life satisfaction, and psychiatric symptoms. Finally, the symposium ends with a presentation which discusses the critical issue of drawing a framework for ethical guidelines which could inform positive psychology intervention in various domains, including clinical.

## PRESENTATION 1

### **CBT and Positive Psychology Interventions for Clinical Depression Promote Healthy Attentional Biases: An Eye-Tracking Study**

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**Keywords:** depression; attentional biases; CBT; positive psychology

*Background:* The role that attentional biases play in depression has received increased attention in theoretical models of the disorder [1]. Although there is a growing interest in the role of attentional biases in depression, there are no studies assessing changes in these biases after psychotherapeutic interventions.

*Aim:* The main objective of our study was to explore changes in attentional patterns to emotional stimuli (i.e., happy, sad and angry faces) in clinically depressed individuals by comparing their attentional performance before and after receiving CBT or PPI to treat their depression.

*Methods:* We used a validated eye-tracking procedure to assess pre-post therapy changes in attentional biases towards emotional information (i.e., happy, sad and angry faces) when presented with neutral information (i.e., neutral faces). The sample consisted of 75 participants with major depression or dysthymia. Participants were blindly assigned to one of two 10 weekly sessions of group therapy: a CBT intervention (N=41) and a Positive Psychology Intervention (N=34).

*Results:* Both treatments were equally efficacious in improving depressive symptoms ( $p = .0001$ ,  $\eta^2 = .68$ ). A significant change in attentional performance after therapy was observed irrespective of the intervention modality. Comparison of pre-post attentional measures revealed a significant reduction in the total time of fixations (TTF) looking at negative information (i.e., sad and angry faces) and a significant increase in the TTF looking at positive information (i.e., happy faces) -all  $p$ -values  $>.02$ .

*Conclusions:* Findings reveal for the first time that psychotherapeutic interventions are associated with a significant change in attentional biases as assessed by a direct measure of attention. The interventions were effective at changing the double attentional biases to emotional information that are typically found in people with depression [2] in a direction similar to the “protective biases” that have been consistently observed in healthy participants direction (i.e., a bias away from negative information and a parallel bias towards positive information) [3, 4], helping them regulate negative emotions [5]. These findings illustrate the importance of considering attentional biases as clinical markers of depression and suggest the viability of modifying these biases as a potential tool for clinical change.

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**PRESENTATION 2****Cultivating Well-being Beyond Symptomatology in Subclinical Paranoia**

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The role of well-being in the process of recovery and prevention of psychosis has been clearly shown (Schennach-Wolff et al. 2010). Jeste et al. (2017) have recently advocated for a positive psychiatry approach. Unfortunately, psychological interventions for people with psychosis have mainly focused on positive symptoms and general psychopathology (Wykes et al. 2008) while showing little effectiveness on well-being (Martinez et al, in press).

We will present the preliminary results of a 12-session group therapy (N=16), called *Feliz\_Mente*. The protocol is informed on the self-serving bias model of persecutory thinking (Bentall, et al. 2001) and positive psychological practice in psychosis (Slade, et al. 2016). The aim of this intervention is to improve well-being and to produce a sense of self-enhancement.



### PRESENTATION 3

## The Efficacy of Positive Psychotherapy and Cognitive-Behavioral Therapy in Depressive Patients: A Randomized Controlled Trial

*Linda Maria Furchtlehne<sup>1</sup>, Anton-Rupert Laireite<sup>2</sup>, Tayyab Rashid<sup>3\*</sup>*

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**Keywords:** positive psychotherapy, cognitive behavioral therapy, efficacy, randomized controlled trial

The present study aims to examine the efficacy of Positive Psychotherapy (PPT) developed by Rashid and Seligman, which is a new approach to the treatment of emotional disorders (depression, anxiety, stress disorders), and to contrast it with the well-established standard intervention against depression, Cognitive Behavior Therapy (CBT). PPT bases upon the assumption that depression can be treated effectively not only by reducing its negative symptoms but primarily and exclusively also by building up resources and strengths, and promoting happiness and well-being.

A total of 92 patients who met DSM-IV criteria for depressive disorder (major depression, dysthymia) based upon SCID-I Interviews were randomly assigned either to the PPT group or to the CBT group in a two-center study. Both treatments lasted for 14 weeks; manualized therapy was administered in a one trained therapist setting in small groups of 6 to 7 patients each in a weekly 2-hours-session schedule.

The primary outcome measures were posttreatment remission rates on patient-reported (Beck-Depression Scale, BDI-II) and observer-rated (Montgomery Asberg-Depression-Scale, MADSD) depression, as well as on patient-rated rates of happiness based on the Positive Psychotherapy Inventory (PPTI), the Flourishing Scale (FS) and the Satisfaction with Life Scale (SWLS). Secondary outcome measures included the Global Severity Index (GSI) of the Brief Symptom Inventory (BSI) and a satisfaction with treatment scale. Data were analyzed using completer as well as intention-to-treat-samples (last observation carried forward, LOCF).

Positive Psychotherapy treatment showed consistently moderate to high effect sizes compared to cognitive-behavioral treatment. Moreover, Positive Psychotherapy treatment resulted into higher effects in all outcome measures than CBT did, primarily concerning the remission rate of depression, the reduction of the level of symptomatic distress currently experienced by the individual and a higher level of felt happiness and meaning of life. Intention to treat analysis resulted into lower effects, however did not come to different results than completer analysis.

The present state of data analysis suggests that Positive Psychotherapy is a very effective and promising systematic approach to the treatment of emotional disorders, especially depression. Data collection however is not yet completed. Data concerning stability of the outcomes are to be collected next and will be available within the next 4 months.

## PRESENTATION 4

### **Ethics in Positive Psychology: High Time for a Unifying Framework?**

*Tim Lomas*

University of East London, e-mail: t.lomas@uel.ac.uk

*Aaron Jarden*

Wellbeing and Resilience Centre at the South Australian Health and Medical Research institute, and Flinders University, e-mail: aaron.jarden@sahmri.com

Although positive psychology (PP) was initially conceived as more a shift in perspective (towards the ‘positive’), in pragmatic terms, it is arguably beginning to function as a distinct discipline. For instance, increasing numbers of people are self-identifying as PP ‘practitioners’ and even ‘positive psychologists’ (even if this label is problematic). Thus, we contend it is time for the field to develop a system of professional (e.g., ethical) guidelines to inform the practice of PP. To this end, we have embarked upon a process of drawing up a system of such guidelines to inform practice in the field. This process includes learning from other ethical frameworks, and liaising with key stakeholders to gather their expert opinion. This presentation will give an update on this process, with a view to encouraging widespread adoption and dissemination of the guidelines that will eventually be produced.

## **Invited Symposium**

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### ***Enhancing the “Best Possible (Organizational) Self”, through Positive Psychological Interventions***

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**Chair:** *Marisa Salanova*<sup>1</sup>

**Discussant:** *Wilmar Schaufeli*<sup>2\*</sup>

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**Keywords:** positive psychological interventions, positive resources, leadership interventions, job crafting

Positive Psychological Interventions (PPIs) were generally defined by Sin and Lyubomirsky (2009) in their meta-analysis as interventions that are “aimed at cultivating positive feelings, positive behaviors, or positive cognitions.” (p. 1). Parks and Biswas-Diener (2013) have been more specific by proposing particular criteria for PPIs, such as: 1) the primary goal of the intervention is to promote some “positive” state(s) (e.g. subjective well-being, positive emotion, meaning); 2) empirical evidence should exist that the intervention successfully manipulates the targeted positive state(s); 3) empirical evidence should exist that improving the targeted state(s) will lead to positive outcomes for the population in which it is administered. We would like to add that PPIs have to be based on robust theories and theoretical models that explain the underlying psychological mechanism.

This symposium tries to understand different types of PPIs taking into account the three criteria mentioned above, as well as the additional theoretical criterion. For example, the PPIs that are included in this symposium built upon such notions as basic psychological needs, character strengths, positive and meaning coping, and psychological capital. Also, they show empirical evidence about the successfully manipulation of positive states, for example regarding mindfulness, positive communication, Leader-as a-Coach Skills, and job crafting. And finally, they show evidence that improving these targeted states leads to positive outcomes for the participants like increased work motivation, work engagement, job satisfaction, work performance, subjective wellbeing, positive affect and activation/energy, and decrease in absenteeism. Finally, these PPIs are based on sound theories such as Self-Determination-Theory (SDT), Broaden-and-Building Theory, the HEalthy & Resilient Organizations Model (HERO), self-regulation goals, and the Job-Demands Resources model.

On the other hand, past research showed that PPIs can be effective in the enhancement of subjective well-being, as well as in helping to reduce depressive symptoms, albeit that effect sizes are usually small to moderate (Bolier et al., 2013). Most of the research was done on the effectiveness of single activities such as strengths (Seligman, Steen, Park & Peterson, 2005; Meyers & Woerkom, 2017), gratitude (Emmons & McCullough, 2003), forgiveness

(Worthington et al., 2007), social connections (Aknin et al., 2013). However, research on “packaged” interventions are less investigated and are a worthy complement of single activities interventions (Parks & Biswas-Diener, 2013). In this symposium packaged interventions on engaging leadership, positive psychological resources, positive communication actions, leader-as-a-coach, and job crafting are discussed, including their effectiveness.

Finally, there is some work that uncovers what types of underlying psychological mechanisms explain why and when PPIs are effective in different applied context such as schools, clinical settings, coaching and organizations. However, as far as we know, there is little or no information on what kind of PPIs are effective context of work. Thought PPIs organizations could get their “Best Possible Self (BPS)” just improving positive factors of people, teams and the organizations as all in the future. So, this symposium presents the empirical evidence about the effectiveness of different packaged PPIs in work settings. More specifically, the symposium includes interventions that are related with work related basic needs and are based on the premises of SDT (presentation by **Lars van Tuin**); an intervention on positive psychological resources such as mindfulness, signature strengths, positive coping and psychological capital using a diary registration (presentation by **Cristian Coo**); different positive communication actions and its effects on subjective wellbeing and control perceptions (presentation by **Belén Varela**); a randomized controlled study combining a team training in a workshop format plus individual sessions of micro-coaching with leaders about leader-as-a-coach skills (presentation by **Josefina Pelaez**); and a synthetic review about job crafting interventions at work (presentation by **Machteld van den Heuvel**).

Finally, **Wilmar Schaufeli**, as an eminent and inspiring applied researcher on the area of PPIs in work and organizations, will conduct the discussion of this symposium in order to conclude main remarks and future orientations for researchers interested on this promising topic.

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## The Effectiveness of an Engaging Leadership Development Program

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**Keywords:** leadership, self-determination-theory, leadership intervention, basic psychological needs, success

*Background:* Self-Determination-Theory (SDT) posits that organizations that embrace an autonomy supportive leadership style do “not only help employees flourish, but also benefit their own bottom line” [1]. On the basis of SDT we have developed an ‘Engaging Leadership’ model [2], and we have tested this model through a training program and intervention model.

*Aim:* The aim of the program was to increase employees’ wellbeing, improve performance and decrease absenteeism by training their team leaders in the principles of the Engaging Leadership model. We also hoped to find that the satisfaction (or frustration) of basic psychological needs would explain the changes.

*Method:* The program consisted of 6 single training days over a period of 8 months, intermediate peer-consultation sessions and individual coaching sessions and was delivered to 14 team leaders, with 148 employees reporting to them at a customer fulfillment center of a global health systems producer in the Netherlands. There was a control group of 268 team leaders and employees from the same company. A baseline measurement was held in March 2016, with follow-up measurements in November 2016 and November 2017. We measured engaging leadership, satisfaction and frustration of basic psychological needs, work motivation, work engagement, absenteeism and job satisfaction.

*Results:* In the first follow-up measurement we noticed a steep drop in absenteeism (from > 7% to < 3%), a rise in job satisfaction and objective performance (measured by orders processed in time). We also saw a small increase in autonomy satisfaction and larger, significant increases in competence and relatedness. At the next follow-up measurement the significant rise in both competence and relatedness satisfaction continued, but autonomy frustration now outweighed autonomy satisfaction. Probably the latter was due to board level leadership decisions to transfer jobs to a lower wage country and to focus leadership more on control pressure to performance. These changes took place of the summer of 2017. Absenteeism is currently on the rise again and we found job outcomes such as work motivation, work engagement and job satisfaction to slide to lower levels compared baseline measurement.

*Conclusions:* The effectiveness of the leadership training was established at the first follow-up and leads to significant increases in both experienced competence and relatedness satisfaction. It seems that specific leadership decisions that were taken after the first follow-up had a negative impact on the initially positive outcomes of the leadership development program.

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## Developing Positive Psychological Resources: A Diary Study of a Positive Intervention Program at Work

*Cristián Coo<sup>1\*</sup>, Alberto Ortega Maldonado<sup>1</sup>, Marisa Salanova<sup>1</sup>*

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**Keywords:** positive intervention, psychological resources, mindfulness, character strengths, positive coping

*Background:* Positive Interventions aimed at optimizing workers' health and workforce sustainability are on the rise, there is some evidence supporting their efficacy and explaining the underlying psychological mechanisms. However, there is little information on the sustainability of positive effects and how positive interventions function when applied to the specific context of work. [1, 2].

*Aim:* The aim of this study was to explore the effects of a Positive Psychological Resources Intervention at work from a daily perspective.

*Method:* The intervention program was offered to the staff as an initiative to improve their psychosocial health, and combined Mindfulness, Character Strengths, Positive Coping and Psychological Capital in a carefully designed sequence of four sessions of four hours each, and a fifth two-hour session focused on evaluating the program and the training transfer to the participants' specific jobs. The participants were asked to fill a daily survey two times a day, at the beginning and at the ending of their workday. They were asked to establish daily objectives at the beginning of their work day and evaluate their achievements, time spent practicing positive resources and levels of wellbeing and activation at the end of the work day. As well, they were asked to specify the activities they were involved in while practicing the specific psychological resource developed during the week.

*Results:* Statistical analysis utilizing multilevel analysis with Mlwin suggest that the intervention program was successful in developing positive psychological resources, linking time spent practicing specific resources and goal achievement with satisfaction ( $\gamma=.019$ ,  $SE=.006$ ,  $t=3.16$ ,  $p<.001$ ), positive affect ( $\gamma=.018$ ,  $SE=.006$ ,  $t=3.00$ ,  $p<.001$ ), and activation/energy ( $\gamma=.017$ ,  $SE=.006$ ,  $t=2.83$ ,  $p<.001$ ).

*Conclusions:* The results of the study shed light on the mechanisms that explain the effectiveness of positive intervention programs at work, highlighting the relevance of resource practice during work specific tasks and activities as means to promoting employees' performance, wellbeing and engagement on-the-job.

### Acknowledgments

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## Positive Communication Actions and High Quality Relationships: A Qualitative Data Analysis

*Belén Varela*

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**Keywords:** practical interventions, positive communication, relationships, work-related meaning

*Background:* Some organizations enter into a downward spiral of routine and conformism that blocks their ability to innovate and improve, influences the way they work and, above all, turns into low-quality relationships. This work attitude has a high impact on work performance and employee satisfaction that in certain entities such as the State security forces or healthcare organizations become particularly serious. The way out of these spirals is to make people aware of their personal ability to influence the environment in a positive way and help them regain their sense of control.

*Aim:* The aim of this presentation is to show the impact of positive communication interventions with 150 health professionals (7 Hospitals) on employee subjective well-being, self-efficacy and meaning construction.

*Method:* During the last years, we have been working on public entities such as the Academia Galega de Seguridade (Galician Public Security Academy), that trains the Security Forces in Galicia, and the Agencia de Formación del Servicio Gallego de Salud (The Health Knowledge Agency – ACIS) with actions of positive communication that consist on 3 sessions of a workshop of 4 hours each. Participants were trained on Character Strengths identification and development, active-constructive responses and development of self-efficacy. These actions aim to equip employees with the skills to communicate better with their peers and customers (broadly speaking: citizens, patients and so on). These skills not only enable them for a better positive relationship, but they empower them to foster the positive change of their organizations and return to find meaning at work.

*Results:* Results using qualitative data analyses confirm our predictions that these positive communication activities had a positive relationship with employee subjective well-being, and self-efficacy. The impact on meaning construction were less significant.

*Conclusion:* Even though acquiring positive-communication skills has a tangible impact on subjective well-being, we consider it necessary to broaden the scope and, in future interventions, take into account how employers perceive the improvement on performance and how citizens perceive an improvement in quality.

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## Leader-as a-Coach Skills, Work Engagement and Job Performance: A Randomized Controlled Study

*María Josefina Peláez<sup>1\*</sup>, Marisa Salanova<sup>1</sup>, Isabel Martínez<sup>1</sup>*

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**Keywords:** positive intervention, leader-as a-coach skills, work engagement, job performance

*Background:* Previous research recognised that good coaching skills are an essential part of effective leadership and positive workplace cultures (Ellinger, Ellinger, Bachrach, Wang, & Elmadağ Baş, 2011). In light of these issues, organizations are increasingly investing in training to develop the coaching skills of their managers, as it is considered to enhance engagement, wellbeing and performance, and to facilitate organizational and personal change (Ellingeic, Ellinger, & Keller, 2003; Grant & Cavanagh, 2007). However, the effectiveness of these programmes and the impact on the development of positive leaders has been rarely assessed (Grant 2007).

*Aim:* The aim of the present study is to explore the impact of a Positive Leadership Intervention Program on Leader-as a-Coach Skills, Work Engagement and Job Performance.

*Method:* In a randomized controlled study, 25 executives and middle managers in an automotive sector company from Spain received a pre-evaluation 360-degree feedback, a Leader-as a-Coach training team workshop (5 sessions of 3 hours each, one per week) and afterwards they get 3 individual micro-coaching sessions over a period of three months. Other 16 middle managers acted as a control group in a waiting-list format. The evaluation of the intervention was based on pre-post-follow up in a 360-degree format. Data was analyzed using repeated measures ANOVA, paired sample t-tests and univariate analyses.

*Results:* Pre-post-follow up evaluation indicated that the intervention program was successful in increasing all the study variables compared to the waiting list control group. Besides, the whole intervention group (N=41), once the control group has finished the program, also showed significant increases from Pre- to Post and Follow Up in the study variables.

*Conclusions:* Practical implications of the study suggest that this intervention program can be valuable as an applied positive psychology intervention in helping leaders develop and increase their coaching skills in workplace and enhance levels of well-being and healthy organizational outcomes.

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## **Job Crafting and other Positive Interventions at Work. Lessons Learned and Future Challenges**

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The Netherlands

**Keywords:** intervention studies, job crafting, job resources, work-related well-being

*Background:* With ongoing technological developments, ways of working and organizing have changed and continue to change. A key characteristic of these new ways of working is that traditional structures of fixed work hours in a fixed place, are replaced by so-called 'boundaryless work'<sup>1</sup>. This transition implies that employees have autonomy to set their own boundaries regarding time and location of work. This trend is supported by the use of technology as well as self-management of work processes and results-focused management<sup>2</sup>. For employees, these changes require a new set of skills and a mindset that differs from more traditional ways of working<sup>3</sup>. For most, these skills are the direct opposite of what was taught in school. In the past decade, new interventions have been developed and tested to support employees in dealing with the key changes at work in a positive way. Besides top-down organization-focused interventions such as job re-design, individual-focused, bottom-up interventions such as job crafting<sup>4,5</sup> and mindfulness, are promising in supporting employee health, well-being and motivation during change.

*Aim:* The aim of this presentation is twofold. First, to summarize key results in the area of positive interventions at work in the last decade, with a specific focus on job crafting interventions. Job crafting refers to the phenomenon that employees manage their own well-being at work by actively shaping their tasks, working conditions, social relationships and cognitions about their job<sup>3,4</sup>. The second aim is to introduce challenges for the future with regards to job crafting and other positive psychology interventions in a digital world.

*Method:* Recent job crafting intervention studies will be reviewed and results will be compared and discussed.

*Results:* Evidence so far indicates that job crafting interventions are a promising way to support employees in managing their own well-being at work. Quasi-experimental studies show positive findings, in that job crafting interventions can positively affect employees' attitudes, well-being and the presence of job resources. For some types of crafting, (i.e. the strategy of reducing one's job demands) results are mixed and inconclusive regarding their potential to boost well-being.

*Conclusions:* Although most results of job crafting intervention studies are positive, a number of theoretical as well as practical questions remain. For example, what is the best way to measure a broad construct such as job crafting? Does job crafting work for all employees? What future research designs may help us to refine our knowledge of successful job crafting? Should we combine job crafting interventions with other positive interventions to address current challenges for employees? Theoretical and practical considerations and implications will be discussed.

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**Invited Symposium**

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***Meaning in Surprising and Unsurprising Places***

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**Chair:** *Michael F. Steger*

This brief talk will provide an overview of the symposium and use data collected during the 2016 United States Presidential Election to suggest that meaning should be considered to be a natural part of how we understand human psychological functioning in our societies. These data show that although voters for each candidate reported momentary deviations in daily meaning in life on, and immediately after, Election Day, their overall trajectories across a three-week period was flat. This suggests that meaning is both responsive to important social events and also resembles a stable resource for those who have it. If this is so, then the rapidly mounting research demonstrating the importance of meaning to human welfare requires an expansion in the scope and application to personal and societal matters of importance. The main talks of this symposium show some important examples of such an expansion.

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## **Implications of Meaning in Life for Personal and Societal Welfare**

*Michael F. Steger*

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Meaning in life research has exploded over the past 5 years, with approximately 1200 of 2700 total citations of the phrase “meaning in life” occurring since 2012 (PsychINFO). Symbolically, meaning has become a standard, and perhaps foundational, part of the positive psychology canon. Practically, this abundance of data on the topic suggests that it is no longer possible for anyone to master the body of relevant knowledge. Aspirationally, scholars and practitioners may set their sights on translating research into suggestions and applications for improving personal and societal welfare. This symposium seeks to present a diversity of approaches to the next big phases of meaning research. Talks will cover meaning and adolescent mental health, meaning in the context of the divisive US Presidential Election, meaning in the workplace, meaning research on a national epidemiological scale, and conclude with an exploration of the potential for relational and collective meaning to promote peace.

## Meaningful Work Experiences among Hungarian Employees: A Socioecological Approach

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**Keywords:** personal projects, meaningfulness of work, self-concordance, environmental fit, person-oriented approach

*Background:* Meaningful work is an important ingredient for a meaningful life. But what do meaningful work experiences depend on? Socioecological psychology emphasizes the role of transactional processes between the person and its sociophysical environment in the emergence of subjective experiences. Pursuit of personal projects (e.g., Little, 2014) represents one of the core processes in this transaction. In this sense, meaningfulness of work (MW) indicates the extent of the perceived fit between one's work related personal projects and the self as well as the perceived fit between the projects and the workplace environment.

*Aim:* In a sample of Hungarian employees we tested the hypothesis that intrapersonal and environmental fit in work-related personal projects (i.e., self-concordance as well as perceived support and concordance with team goals, respectively) independently predicted MW. Moreover, we aimed at finding patterns of these characteristics using a person-oriented approach and identified associations of these patterns with experiences of MW.

*Method:* We used an adapted version of the Personal Project Assessment procedure in a sample of 1940 Hungarian employees. Autonomous and (negatively) controlled reasons for work projects indicated aspects of intrapersonal fit, while support from colleagues and concordance of the project with the team's goals represented environmental fit. We assessed the extent of MW with Work and Meaning Inventory (Steger et al., 2012) as the output variable.

*Results:* Higher self-concordance and team-concordance in projects predicted higher MW scores even after controlling for satisfaction with work. Person-oriented analysis of personal project characteristics revealed four types of motivational profiles of the employees: "committed" (high autonomous and low controlled motivation with high support and team-concordance), "decided" (medium autonomous and high controlled motivation with medium support and team-concordance), "fighter" (medium autonomous and low controlled motivation with low support and team-concordance) and "oppressed" (very low autonomous and low controlled motivation with low support and team-concordance) patterns. The "Committed" group had the highest and the "Oppressed" the lowest WAMI scores.

*Conclusions:* Our results indicate that the experience of meaningful work emerges as a joint result of a perceived fit between intrapersonal and environmental experiences at the workplace. Moreover, person-oriented analysis showed that specific combinations of these experiences had an effect on meaningfulness in one's work. Subjective meaningfulness is a result of transactional processes between the person and its environment.

## Relations between Specific Personality Traits and Meaning in Predicting Engagement in Health Risk Behaviors

*Bradley J. Conner*

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While research has examined relations between negative personality traits such as sensation seeking, impulsivity, and emotion dysregulation and engagement in health risk behaviors (e.g., substance misuse and high risk sexual behavior) and meaning and engagement in these same behaviors, there no research on interactions between the specific personality traits and meaning on engagement in these behaviors. Data from 2 different samples, a community sample of 580 college undergraduates and a clinical sample of 100 adolescents in an inpatient short-term residential hospital, were analyzed to determine bivariate relations between the personality traits and meaning and their interactive effects on engagement in health-risk behaviors. Meaning was measured with 2 subscales, presence and search, from The Meaning in Life Questionnaire (MLQ; Steger, 2010). Sensation seeking was measured with 2 subscales, Risk Seeking (RS) and Experience Seeking (ES), from the Sensation Seeking Personality Type Questionnaire (SSPT, Conner, 2018). Impulsivity was assessed with 4 subscales, Negative Urgency, Lack of Premeditation, Lack of Perseverance, and Positive Urgency, from the UPPS-P scale (Cyders et al., 2007). Emotion dysregulation was assessed with 6 subscales, nonacceptance of emotional responses, difficulty engaging in goal-directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity, of the Difficulty with Emotion Regulation Scale (DERS; Gratz & Roemer, 2004).

Presence was significantly negatively correlated with RS in both samples; significantly negatively correlated with all 6 of the subscales of the DERS in both the community and clinical samples; and significantly positively correlated with ES in only the community sample, and significantly negatively correlated with RS in the clinical sample. Search was significantly positively correlated with all of the subscales of the DERS except Awareness in the community sample but was only significantly negatively correlated with Awareness in the clinical sample. Search was only significantly positively associated with negative urgency while presence was significantly negatively associated with all 4 subscales of the UPPS-P in the community sample. Search and presence were significantly negatively correlated in both samples. Previous research has shown the sensation seeking, impulsivity and emotion dysregulation are robust predictors of engagement in health risk behaviors. In the current study, analyses indicated the presence moderates the relations between the personality traits and engagement in health risk behaviors such that higher presence disrupted the positive predictive pathways from personality to health risk behaviors in both the community and clinical samples. Implications are that presence is a leverage point for offsetting the impact of negative personality traits on engagement in health risk behaviors and that interventions attempting to reduce the risk associated with negative personality traits should focus on increasing presence of meaning.

## **Meaning at the National Level: Report from Iceland**

*Dora Gudmundsdottir*

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Meaning has been studied almost exclusively at the individual level. Data from such research projects has indicated that those who report greater meaning in life also enjoy more desirable mental health, lower levels of problematic substance use, less suicidal ideation and behaviors, as well as better health and greater longevity. These associated benefits of meaning in life are also public health priorities, suggesting the importance to governments of analyzing meaning at the national level. Although there is one prior analysis of meaning at a cross-national level, no research has been published looking at a large cross-section of any single country. Although individual-level data are compelling, there are three central questions that must be answered to propose that meaning should be a consistent component of public health monitoring by states: (1) can meaning be reliably measured in large population studies?; (2) what are the predictors and concomitants of meaning on the national scale?; and (3) does meaning explain variance in important public health outcomes? This talk presents data collected in 2009, 2012, and 2017 from a substantial portion of the population of Iceland with an eye toward addressing each of these questions.

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## **Contributions towards Peace: Co-construction of Collective Meaning in Community Contexts**

*Helena Águeda Marujo\**, *Luis Miguel Neto*

School of Social and Political Sciences – ISCSP  
Centro for Administration and Public Policies – CAPP  
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Studies on Meaning follow a long tradition of thought and approaches, first in the philosophical domain, and more recently in an empirical scientific perspective. However, the concept has been mainly addressed as an intra-individual phenomenon. This kind of individual approach is extremely valuable, but doesn't take into consideration all of its potentialities. Our line of research and though in positive psychology is dedicated to a relational and communitarian point of view, addressing directly pressing topics such as poverty and public happiness, identity transitions and resilience associated with unemployment, positive-constructive ways to manage conflict, balance between the social values of modernity and the quality of life in sustainable environments.

The purpose of this presentation is to explore the significance of a relational and collective perspective on meaning, using methodologies to promote social cohesion and positive peace.

We will present the guidelines of a UNESCO Chair on Education for Global Peace Sustainability, recently approved, that take into consideration diverse programs aimed at enriching the lives of minority and poverty populations, and the methods and results of several positive interventions and action-research projects implemented in the last ten years in Portugal and South Africa. They all converge to show how participative methods using particular forms of appreciative communication among diverse populations, namely the World Café, and the emergence of “third places”, can promote collective and collaborative meaning. It is the coordination of meaning that allows for a sense of common identity, connection and satisfaction that activates the necessary vitality that fuels the conjoint movement into the complex, uncertain and unpredictable human situations with a renewed hope in the future.



## **Invited Symposium**

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### ***Promoting Healthy and Fully Functioning Individuals and Organizations: a Travel from Theory and Research to Practical Methods and Reality***

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**Chair:** *PhD Lisa Vivoll Straume*<sup>1\*</sup>

**Presenters:** *Prof. Joar Vittersø, (University of Tromsø), PhD Marit Christensen (Norwegian University of Science and Technology), PhD Benedicte Langseth-Eide & MA Håkon Tveiterås, Vice President HR Thor Øyvind Olsen (Widerøe) & Head of HR/MA Dorte Rygh Hestnes (Widerøe)*

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**Keywords:** health promotion, fully functioning, basic needs, strength-based leadership, change readiness, job crafting

#### **Overall Abstract:**

With an increasing demand for change ready, healthy, and high performing employees, positive psychology has made a huge leap into the practical field. Theories and models like the Job-Demand Resources Model, Self-Determination Theory, job-crafting and strength-based leadership have reached board rooms, leaders and HR-personnel, and have become popular approaches in organizational initiatives. Yet fame comes at a price. Science and practice represents two different worlds, speak different languages and measure success in different ways. For science to be applicable in practice, it has to be converted to simple, hands-on stories and tools. The organizational initiatives we eventually implement may thus be quite far from the statistical correlations of causes and effects that such initiatives seek to replicate. In the transition from real life to research, rules for scientific scrutiny defines the phrased. In the process of transforming needs, values, thoughts and feelings into means and standard deviations, we may lose some of the depth and complexity of being human.

The aim of the present symposium is twofold: First, it is to take the audience on a travel from theory and models to research, practical tools, and eventually the story about benefits and barriers associated with practicing positive psychology in real life. Although the gap between research and practice is narrowing, we still have a lot to learn from each other. The present symposium seek to inspire for a closer collaboration between four perspectives with the same phenomenon in mind. Second, the travel is made through some of the key elements in applied positive psychology to illustrate why and how organizational initiatives can promote healthy, fully functioning employees that are fit to master the demands and resources of worklife.

First, Prof. Joar Vittersø discusses the role of basic needs in a well-functioning work life, with a critical view on how needs are used to explain work motivation in some of the most popular theories and models. Second, PhD Marit Christensen (NTNU) will present research on how organizational interventions aimed at building change ready, healthy, and work engaged employees are more likely to succeed in bottom-up processes. Particularly, job crafting let personal resources come into play. Third, PhD student Benedicte Langseth-Eide and MA Håkon Tveiterås will present practical tools used in leadership development and organizational initiatives aimed at promoting healthy and fully functioning employees and organizations. These tools are founded in positive psychology and based on research. Finally, HR director in the Norwegian flight company Widerøe illustrates the benefits and barriers of implementing strength-based leadership and job crafting.

The present symposium provides theory, research, practical methods, and a real-life company case that have tested these theories and methods in a strength-based leadership development program. Consequently, the symposium contributes to minor the gap between research and practice.

## PRESENTATION 1

### **Basic Needs First: Self-Determination and Other Determinants of a Good Work Life**

*Joar Vittersø*

Department of Psychology, The Arctic University of Norway, e-mail: joar.vitterso@uit.no

Eudaimonic philosophy suggests that we feel good and function at our best when acting in accordance with our human nature. The phrase “being well and doing well in being well” expresses this idea in brief. In psychology, the Self-determination theory has modeled the key features of eudaimonic functioning with reference to the concept of basic, psychological needs. A number of studies has shown how the fulfillment of such needs leads to better work performance and higher job satisfaction. The present talk also takes a basic needs perspective on the well-functioning work life, and it looks at some consequences of thwarted needs. The presentation is, however, critical to the use of basic needs as an explanation of work motivation. Rather it proposes that the interplay between job demands and resources may account for motivational states in general, and intrinsic motivation and work engagement in particular.

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**PRESENTATION 2****Resources, Work Engagement and Academic Productivity – a Study of Bottom-up Health Promoting Interventions***Marit Christensen*

Norwegian University of Science and Technology, Norway

In light of the Job Demands-Resources theory (Bakker & Demerouti, 2014) the aim of this presentation is to show results from analyzing the impact of job resources and work engagement on academic productivity measured by publication and credit points. Secondly, the aim was to investigate how the bottom-up perspective affected the success of the health promoting interventions of the ARK-programme. In order for employees to feel good, have good health and be productive, a constructive psychosocial working environment is important (Bakker & Demerouti, 2014; Christensen, Saksvik & Karanika-Murray, 2017). Organizations usually initiate top-down governed interventions to increase motivation and performance and decrease sickness absenteeism. However, they do not always get the expected results (Aust, Rugulies, Finken, & Jensen, 2010). Many organizations also find that the bottom-up-processes of engagement and performance, driven by the employees themselves, to be useful. The results and experiences are based on the ARK-programme, which is a work environment and climate survey for the academic sector in Norway. ARK is a comprehensive research based health promoting plan/instrument for investigation and implementation of occupational health interventions (Innstrand, et al, 2015). The results are based on analyses from the ARK-databank (over 15000 respondents) and qualitative experiences from 18 different universities and university colleges in Norway using the ARK-intervention programme. Firstly, the results supported a positive psychological focus and showed that work engagement stimulated research publications. Secondly, experiences from using ARK showed that the bottom-up processes was one of the greatest success factors in creating interventions with health promoting results. It created a dialogue and a communication channel regarding the work environment, which lead to a common understanding, participation of both the employees and the leaders, readiness for change and organizational development. The employees reported that having a positive and health promoting focus was motivating for participating in the programme.

### PRESENTATION 3

## **Practical Approaches to Applying Positive Psychology for Healthy, Fully Functioning Employees**

*Benedicte Langseth-Eide<sup>1</sup>, Håkon Tveiterås<sup>2</sup>*

<sup>1</sup>PhD student, The Arctic University of Norway, MIND

<sup>2</sup>MA, (MIND)

Companies looking to build productive, distinctive organizations will find much of their competitive advantage in managing their human capital. It is a leadership skill to build healthy work environments where people can thrive and be at their best, and with practical training, skills can be improved. In the present paper, we will share our practical approach to designing positive organizational initiatives aimed at promoting healthy and fully functioning employees, with a particular focus on strength-based leadership.

Our business case is the Norwegian air craft company Widerøe, where we have ran different development projects. Firstly, leadership development programs for selected groups of managers aimed at implementing strength-based leadership. Secondly, we trained base managers and HR-personnel in communication and relational skills to follow up employees on sick-leave, with the aim of reducing sick-leave and increasing healthy and well functioning employees.

Our presentation will share elements from the practical application of the training done in the sick-leave project. The training was organized in a pre-defined structure of three steps: Step 1) Create shared mental models through *knowledge input* on theoretical and empirical foundation (e.g. positive psychology, JD-R model) and *knowledge creation* (e.g. active listening and strength-spotting). Several studies have revealed that shared mental models creates common expectations and understanding of working processes, increase knowledge sharing and improves problem solving (e.g., Xiang, Lu, & Gupta, 2013; Tjosvold, Yu, & Hui, 2004). Step 2) Facilitating, and teach how to facilitate, job crafting - a process of redefining and reimagining job designs in personally meaningful ways (Wrzesniewski & Dutton, 2001). Step 3) Role play simulation on cases that captured the complexity of reasons and reactions of being on sick-leave. This process refers to an act of learning through (a) feedback, (b) taking others perspectives (i.e., the employees), (c) observation and reflection, and (d) exploration of opportunities. Studies have revealed that these elements may increase self-awareness (of own communication style), self-regulation, relationship management (Fullan, 2014; Goleman, 2017) and problem-solving skills (Sekaran & Bougie, 2016).

In addition to sharing how we conduct the practical training, we will discuss the challenges associated with converting research to practice, and some ideas on how to overcome these challenges.

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**PRESENTATION 4****The Story about Health Promotion and Fully Functioning Employees in Real Life: Benefits and Barriers***Thor Øyvind Olsen<sup>1</sup>, Dorthé Rygh Hestnes<sup>2</sup>*<sup>1</sup>Vice President HR Widerøe, e-mail: thor.oivind.olsen@wideroe.no<sup>2</sup>MA/Head of HR, Widerøe

Widerøe is the largest regional airline operating in Northern Europe. Established in 1934, we proudly represent the eldest airline in Norway. We have 3000 employees working with specialized tasks in a complex operational organization. Our vision is to create opportunities amongst large and small destinations. On average, a Widerøe flight is departing or arriving every second minute. Widerøe has a solid position in the domestic market. At the same time, the airline industry is characterized by rapid changes like tougher competition, major increase of fees and taxes, increased focus on sustainable solutions, and new technology. The extensive development of the industry results in increased demands on our workers, which in turn may have negative effects on employee health, productivity and performance.

To deliver on our vision, deal with the demands, and act upon the opportunities in times of change, a key success factor is a strong leadership philosophy. We are dependent on employees who are change ready, resilient, and master the skill of job crafting, but only through leadership may these resources be realized. Since 2017, we have implemented positive psychology and strength-based leadership in collaboration with the Norwegian research-based consultancy company, MIND. In close collaboration with the top management, selected groups of leaders have received practical training on tools for promoting healthy and fully functioning employees, in addition to a project on reducing sick-leave. Qualitative interviews are now being conducted and preliminary results will be presented at the 9th ECPP.

The theoretical and empirical basis of which we gain our inspiration plays a crucial role in approving the organizational initiatives we depend on. Yet theories and models alone are not easily applied in real life. In working with sick-leave particularly, the complexity of human interaction in different contexts, tasks and relations demands flexibility and creativity. It requires the depth and courage to reach into the most vulnerable sides of being human. Sometimes, theories come short. As challenging as it may be, we believe that training a dedicated group of our leaders in soft skills with focusing on strength spotting, active listening, perspective taking and job crafting helps create change readiness in the process of promoting health, reducing sick-leave, and creating work engagement. Our paper will share insight into the benefits as well as the barriers associated with implementing the strength-based approach. Thus, our paper contributes to minor the gap between research and practice.

## **Symposium**

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### ***The Experience of Disease: Integrating Patients' and Caregivers' Perspectives***

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**Convenors:** *Marta Bassi*<sup>1\*</sup>, *Antonella Delle Fave*<sup>2</sup>

**Discussant:** *Tamás Martos*<sup>3</sup>

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**Keywords:** disease, patients, caregivers, well-being, resources

#### **Symposium Overview**

XX century medical achievements and growing wealth in western countries have greatly contributed to extend individuals' life expectancy. However, they have also brought about an epidemiological transition towards chronic and life style related illnesses, currently challenging national welfare systems' ability to provide adequate long-term services. It is thus important to identify the social and psychological resources allowing individuals to optimize their health conditions and to experience well-being in the face of disease. In addition, there is growing awareness of the need for broadening the focus of health professionals' attention to encompass both patients and their families, in line with a systemic view of disease as a condition affecting the whole care system.

This symposium presents studies conducted in different countries among patients and caregivers, with the aim to investigate their experience of disease and assess their resources in disease management and adjustment. Stefan Höfer focuses on the quality of life (QoL) of patients with ischemic heart disease. Two longitudinal studies comparing the effectiveness of different QoL measures in predicting major cardiac events and mortality over a 5-year span show that QoL predicts both adverse events and cardiovascular health independent of the measure being used. Marlena Kossakowska and her colleagues address the relationship between illness perceptions and benefit finding/benefit reminding among patients with chronic diseases. Their presentation provides evidence on the identification of different illness perception profiles (chance, challenge, adversity and torment), and on the role of age, personal growth initiative, search for meaning, and coping strategies as predictors of benefit finding/benefit reminding. Results highlight the interplay between type of predictors and patients' illness perceptions profiles. Chiara Ruini and her colleagues analyze caring burden and well-being among caregivers of persons with Parkinson's Disease (PD), comparing them to control caregivers of individuals with non-neurological diseases. Findings show that caregivers of PD patients present similar levels of burden but higher distress and depression

as well as lower psychological well-being than controls. In addition, caring burden is predicted by presence of depression and by specific well-being dimensions. Finally, Marta Bassi and her colleagues test the mediational role of coping strategies in the relationship between practical-physical and psycho-social caring tasks and perceived well-being among caregivers of persons with multiple sclerosis. Empirical support is provided for the expected mediation, highlighting that the relationship between different types of caring tasks and well-being varies based on the adoption of adaptive vs. maladaptive coping strategies. Discussion by Tamás Martos will focus on the implications of these findings for disease adjustment research and intervention.



## Quality of Life in Heart Disease

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**Keywords:** quality of life, heart disease

*Background:* Quality of life (QoL) is an established and important outcome parameter in cardiology for heart disease patients. Self-reported QoL and change in subjective QoL have been shown to be a predictor for different major cardiac events, including mortality [1,2]. Several measures to assess QoL of heart disease patients have been developed so far.

*Aim:* This analysis aimed to investigate the impact of self-reported subjective QoL in heart disease patients using several independent instruments in different samples at baseline and over time.

*Method:* Two independent studies were carried out (study 1:  $N = 386$ , male = 72.2%, age = 62.8, study 2:  $N = 662$ , male = 74.9%, age = 65.6) in patients with ischemic heart disease. Patients completed different QoL measures (MacNew, HeartQoL, SF-36) at baseline, one month, three months and were followed up to 5 years. All-cause mortality, major cardiac events (including rehospitalisation) were assessed.

*Results:* Mean change scores in QoL predicted 4-year mortality (hazard ratio HR, 1.80, 95% CI 1.09, 2.65,  $p=0.021$ , study 1). A Cox regression model with adjusted scores showed a significant linear association between mortality and lower baseline global QoL.

*Conclusions:* Data indicate that QoL is a significant predictor for adverse cardiac events and cardiovascular health, independent of QoL measures being used. Serial assessment of QoL on a routine basis may be helpful to identify patients at higher risk for adverse cardiac events, which in turn may have implications for follow-up frequency and treatment decisions in individual patients. Overall, subjective perception on QoL of cardiovascular patients merits serious attention within the health care systems, in particular by health care providers.

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## Psychological Predictors of Benefit-Finding / Benefit-Reminding in Chronic Illness Depending on Illness Perceptions Profile

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**Keywords:** benefit-finding, benefit-reminding, illness perceptions, chronic disease

*Background:* The study was inspired by the concept of benefit-finding / benefit-reminding [1], the theoretical approach of the Common-Sense Model of Self-Regulation of Health and Illness [2] and Park and Folkman's Meaning Making Model [3,4].

*Aim:* The aim of this study was to find the predictors for benefit-finding/benefit-reminding (BF/BR) from going through a disease among people with chronic diseases based on different profiles of chronic illness perceptions. The predictors were: age, personal growth initiative [5], search for meaning, and coping strategies (task-, emotion-, avoidant- and religious-oriented).

*Method:* The participants were patients suffering from chronic diseases ( $N = 438$  and finally  $N = 416$ ; e.g. multiple sclerosis, heart disease, cancer, dermatoses). All the participants filled in five questionnaires: Illness Perception Questionnaire-Brief [6], Personal Growth Initiative Scale – version I [7], Meaning in Life Questionnaire [8], Coping Orientations to Problems Experienced [9], and Silver Lining Questionnaire [10].

*Results:* First, cluster analysis was carried out to reveal the profiles of illness perceptions among chronically ill people. Four types of profiles of illness perceptions were established: CHANCE, CHALLENGE, ADVERSITY and TORMENT. Second, stepwise regression analyses were performed separately in each cluster of illness perceptions to find the predictors for BF/BR. The results show that search for meaning and task-oriented coping were the best predictors for BF/BR in two types of illness perceptions: CHANCE and TORMENT ( $R^2 = .21$ ,  $p < .001$  and  $R^2 = .18$ ,  $p < .01$ ). In patients who assess their illness as CHALLENGE, the predictors for BF/BR were: age ( $\beta = .26$ ,  $p < .01$ ), search for meaning ( $\beta = .24$ ,  $p < .001$ ), personal growth initiative ( $\beta = .20$ ,  $p < .01$ ) and two coping styles: religion-oriented ( $\beta = .28$ ,  $p < .001$ ) and task-oriented ( $\beta = .18$ ,  $p < .01$ ). The coefficient of determination was  $R^2 = .27$ ;  $p < .05$ . In patients who perceive their illness as ADVERSITY, the predictors for BF/BR were personal growth initiative ( $\beta = .29$ ,  $p < .01$ ), religion-oriented ( $\beta = .31$ ,  $p < .001$ ) and emotion-oriented ( $\beta = .24$ ,  $p < .01$ ) coping. The coefficient of determination for this model was  $R^2 = .30$ ;  $p < .001$ .

*Conclusions:* Predictors of BF/BR depend on the type of illness perceptions. Benefit finding and benefit reminding are predicted by the same variables in the most positive (CHANCE) and the most negative (TORMENT) illness perceptions.

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## Caregiver Burden and Well-being in Caregivers of Patients with Parkinson's Disease

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**Keywords:** well-being, life satisfaction, caregiver burden, depression, Parkinson's disease

*Background:* Historically, studies on caregivers of patients with Parkinson's Disease (PD) investigated the difficulties and negative consequences associated with this condition, that entails chronic and progressive impairments in daily functioning and quality of life [1]. With the recent development of Positive Psychology, research started focusing on resources, protective factors, and on the possible positive consequences of the caregiving activity [2,3].

*Aims:* The study aimed (1) to compare the levels of distress and well-being in a sample of caregivers of PD patients with those of a matched sample of control caregivers of individuals with non-neurological diseases but who need daily assistance for their age-related health problems; and (2) to analyze the relationships among well-being, distress and caregiver burden in the whole sample of caregivers.

*Method:* 46 caregivers of PD patients were compared to 50 control caregivers on measures concerning psychological well-being, life satisfaction, gratitude, post-traumatic growth, distress and symptomatology. Regressive and comparative analyses were performed in the whole sample of caregivers ( $N = 96$ ) in order to explore the possible predictors of caregiver burden and the differences in well-being and distress according to the levels of caregiver burden (high versus low).

*Results:* Caregivers of PD patients reported higher distress and symptomatology, lower well-being and fewer psychological resources than controls. However, they did not differ in terms of caregiver burden. Age, psychological well-being and depression emerged as the main predictors of caregiver burden.

*Conclusions:* Although our caregivers of PD patients seem to be more vulnerable in terms of psychological well-being and distress, they do not exhibit higher caregiver burden when compared to controls. Both in PD and in other types of caregiving, the presence of depression but also of specific dimensions of well-being (environmental mastery, personal growth) predicted caregiver burden. Addressing these predictors through appropriate psychosocial interventions may buffer caregiver burden.

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## The Caring Experience in Multiple Sclerosis: Coping Strategies as Mediators Between Caregiving Tasks and Caregivers' Well-Being

*Marta Bassi<sup>1</sup>\*, Sabina Cilia<sup>2</sup>, Monica Falautano<sup>3</sup>, Claudia Niccolai<sup>4</sup>, Marianna Pattini<sup>5</sup>, Erika Pietrolongo<sup>6</sup>, Maria Esmeralda Quartuccio<sup>7</sup>, Manuela Valsecchi<sup>8</sup>, Rosa Gemma Viterbo<sup>9</sup>, Beatrice Allegri<sup>3</sup>, Maria Pia Amato<sup>4</sup>, Giovanna De Luca<sup>6</sup>, Claudio Gasperini<sup>7</sup>, Monica Grobberio<sup>8</sup>, Eleonora Minacapelli<sup>3</sup>, Francesco Patti<sup>2</sup>, Maria Trojano<sup>9</sup>, Antonella Delle Fave<sup>10</sup>*

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**Keywords:** caregiving tasks, coping strategies, well-being, multiple sclerosis

*Background:* The provision of informal caregiving represents an invaluable asset in the management of multiple sclerosis (MS), a neurodegenerative disease characterized by variable course and largely unpredictable exacerbations, resulting in growing impairment in physical and cognitive functioning. Caregiving tasks include practical-physical as well as psycho-social assignments which can undermine caregivers' well-being [1]. Identifying the adaptive and maladaptive coping strategies adopted to face these tasks can shed light on caregivers' adjustment to their role.

*Aim:* Based on Lazarus and Folkman's transactional model, we tested the mediational role of coping strategies in the relationship between caregivers' tasks and well-being dimensions.

*Methods:* A group of 680 carers of persons with MS (*M* age = 46.45; 51.2% women) was recruited in eight MS centers in Italy. Caregiving tasks (instrumental chores, ADL care, psycho-emotional support, social-practical assistance) were assessed through the Caregiving Tasks in MS Scale [1]; coping strategies (avoidance, criticism and coercion, practical assistance, supportive engagement, positive reframing) were investigated through the Coping with MS Caregiving Inventory [2]; well-being was assessed through the Psychological Well-Being Scales [3,4], and depression through the Beck Depression Inventory II [5]. Mediational models were performed using SPSS PROCESS macro, controlling for caregiving years and patients' disability level.

*Results:* Significant indirect effects of ADL care, psycho-emotional support and social-practical assistance were detected for both psychological well-being and depression, while no effect was identified for instrumental chores. Except for practical assistance, all coping strategies were significant mediators in the models. ADL care was negatively related to psy-

chological well-being and positively to depression through the less frequent use of supportive engagement and positive reframing, two adaptive strategies whose preferential use was instead related to higher psychological well-being and lower depression. In addition, supportive engagement and positive reframing mediated the positive relation of caregiving tasks referring to psycho-emotional support and social-practical assistance with well-being. Conversely, the use of maladaptive strategies (avoidance and criticism and coercion) mediated the negative relationship of these two caregiving tasks with well-being.

*Conclusions:* Caregiving tasks in MS are related to caregivers' well-being through the mediation of coping strategies. Particularly, findings suggest that the relationship between different types of tasks (practical vs. psycho-social) and carers' well-being vary according to the adoption of different kinds of coping strategies (adaptive vs. maladaptive). Intervention programs should therefore take into account all these elements, in order to effectively promote caregivers' well-being.

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**Symposium**

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***Psychological Resources: Why and How they Contribute to Well-being in Clinical and Non-Clinical Samples***

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**Chair:** *Antonia Csillik*

**Brief Summary**

The aim of this symposium is to present recent developments and empirical findings on various psychological resources, i.e. stable dispositions that facilitate adaptation in life, protect against the negative impact of adverse events and facilitate achievement of optimal levels of subjective wellbeing and physical health (Csillik, 2017). These psychological resources act as protective factors and have a buffer effect against the development of psychopathology. Across four presentations we will extensively discuss the protective role of key psychological resources- including self-compassion, self-esteem, confidence, trust and psychological capital factors (optimism, hope, resilience, and self-efficacy) - on psychopathology and their positive effects on physical and psychological well-being, both in clinical and non-clinical samples.

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**PRESENTATION 1****From Self-esteem to Self-compassion: Effects against Psychopathology and Influence on Well-being**

*Antonia Csillik<sup>1</sup>, France Jordi Quoidbach<sup>2</sup>*

<sup>1</sup>University Paris Nanterre

<sup>2</sup>ESADE Business School, Spain, Fabien Fenouillet, University Paris Nanterre, France, Charles Martin-Krumm, APEMAC EA 4360 UDL, Metz, France

*Background:* Emerging research data shows that self-esteem and the new concept of self-compassion play an important role in mental health and are related to positive outcomes. The aim of this study is to test the buffer effects of both self-esteem and self-compassion against psychopathology, together with their effects on well-being.

*Methods:* We recruited 17068 participants (M age = 39.52 years, SD=13.65 ; 80.9% female; 19.1% male) as part of a large online survey on emotions and well-being. A large majority of the sample was French (84.6%).

*Findings:* We used structural equation modeling for testing two models. On first model both self-esteem and self-compassion predicted well-being. In second model we use self-compassion as a predictor and we tested a mediator effect of self-esteem on depression. We use different indicator fit for evaluate model adjustment. The fit indices values show a good model fit, both for model 1 (well-being) and 2 (depression) and confirm our hypothesis. Self-esteem has a significant positive effect on subjective well-being, as well as self-compassion. These resources facilitate thus well-being and subjective happiness. Moreover, there is a significant positive effect of self-compassion on depression, showing its buffering effects against it. There is a partial mediation of self-compassion on depression via self-esteem.

*Discussion:* We need to further explore those effects and better understand the interactions of self-esteem and self-compassion and well-being across lifespan.



## PRESENTATION 2

### **The Role of Trust in Psychological and Physical Wellness**

*Zoë Chouliara*

*FHEA AFBPsS*, Associate Professor in Counselling, Transformation & professional Practice,  
Edinburgh Napier University

*Background:* Trust lies at the foundation of nearly all major theories of interpersonal relating and human development. Despite its great theoretical importance, a limited amount of psychological research has examined how and why trust develops, is maintained, and is occasionally disrupted in relationships, even more so in adversity. We have no empirically based frameworks on how to establish, maintain and utilise trust and how to repair ruptures.

*Methods:* We will present findings from an original programme of research on the role of trust in managing adversity and threat. The mixed methods programme originally investigated the role of trust in recovering from extreme relational adversity and more recently on the immune system, especially in terms of inflammation biomarkers. Findings put forward: A new evidence based Definition of trust as a psychological resource; A comprehensive Theory of Trust, including components, facilitating and hindering factors; and A trust-based Clinical Framework.

*Findings:* The findings of our research highlighted the key role of trust in managing physical and emotional threat and recovering from adversity. Trust appears important in maintaining the integrity of the Self, reducing regulating threat, and acting as a buffer between adversity, inflammation and cell necrosis. The integral ability of humans to recover from adversity when the right relational conditions are provided, which is key in positive psychology, is also highlighted in our findings.

*Discussion:* In an increasingly traumatogenic world, characterised by increased uncertainty and even trust violations, trust based interventions could be invaluable in managing adversity, increasing social cohesion, and relational resilience in a preventative and remedial manner. Our findings redefine relational variables and put psychological resources back in the forefront of research and practice.

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**PRESENTATION 3****How Leisure Activities Contribute to Well-being in the Elderly?***Elisabeth Grimaud*

Centre de Ressources pour la Cognition et l'Apprentissage (CeRCA, UMR CNR 72-95),  
University of Tours, France

*Background:* European population aging has become a prominent topic. Countries require solutions to enhance the quality of life of older people. Participating in leisure activities seem to contribute to a better life satisfaction and self-esteem in the elderly but only a few studies tried to better understand the role of introducing leisure activities with older people.

*Objectives:* The aim of this study was to examine the effect of leisure activities during lifespan and the effect of a multimodal stimulation program using leisure activities on self-esteem and life satisfaction of older people.

*Methods:* 40 people over 60 years old took part in the experiment. They were divided into two groups: 1 group followed a program of multimodal stimulation using leisure activities with games and 1 control group only gathered every week. There were 8 sessions of multimodal stimulation using leisure activities like games, one-hour session a week. Measures have focused on cognitive functions, life-satisfaction and self-esteem. They have been evaluated before and after the training program.

*Results:* Results revealed positive correlations between the level of participation in leisure activities, self-esteem and life satisfaction. Findings highlighted the benefits of the multimodal stimulation program using with leisure activities on cognitive functions and self-esteem.

*Discussion:* The growth of the elderly population presents a great challenge to European governments. Participating in leisure activities seem to offer an effective way to enhance cognition, social relationship and life satisfaction. Our findings point that leisure activities are a good means to better life satisfaction when people practice during lifespan, and that they also improve cognition and self-esteem when people practice in the elderly.

#### PRESENTATION 4

### **The Role of Psychological Capital in Workplace Well-being: Comparative Study of Hungarian and Australian Employees**

*Agota Kun<sup>1</sup>, Peter Gadanez<sup>1</sup>, Zsuzsa Nyolczas<sup>1</sup>, Yong W. Goh<sup>2</sup>*

<sup>1</sup>Budapest University of Technology and Economics, Hungary

<sup>2</sup>University of Southern Queensland, Australia

*Background:* There are emerging research findings that focus specifically on workplace well-being and happiness, and aim to reveal factors determining national differences. In our research we focused on subjective happiness, workplace well-being, and psychological capital (PsyCap) as psychological resources, and examined the differences between the two nations.

*Methods:* Our sample consisted of 317 (140 Hungarian and 177 Australian) employees. Hungarian respondents' ages ranged from 20 to 70 years, with an average age of 37,8, and Australian participants were 36,5 years old on average, ranging from 18 to 74.

*Findings:* Meaning of work and accomplishments are the two most important components of Hungarian participants' workplace well-being, while positive emotions, engagement, and positive relationships are stronger components of Australian participants' well-being. We didn't find significant differences in perceived subjective happiness between Hungarian and Australian samples. Results clearly show that the examined psychological capital factors (optimism, hope, resilience, and self-efficacy) affect each other positively and they have an important role in the formation of subjective well-being. However, there is a difference between the two nations to the extent to how these factors influence their subjective wellbeing.

*Discussion:* The results indicated that employees' psychological capitals contribute positively related and have contributed to their workplace well-being, so developing and building their PsyCap has real benefits for both individuals and organisations in enhancing workplace well-being.

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## Symposium

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### *More Flow, more Well-being: Studies on how to Increase Flow in Daily Life and Reap the Benefits*

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**Chair:** *Orin C. Davis*

#### **Symposium Overview**

Even as there is considerable research about conceptions of flow, its antecedents, and its biopsychosocial correlates, the body of literature on creating more opportunities for flow in daily life is still growing, as is the number of investigations cataloguing the benefits of flow experiences across a wide range of contexts. Beginning with relatively early research on flow (e.g., Sato, 1998), most of the work on finding flow has focused on assessing the frequencies that exist in a variety of contexts and how wellbeing is reflected in the quality and/or quantity of flow (e.g., Bakker, 2005; Delle Fave & Bassi, 2009; Salanova et al., 2006). Few studies, however, focused directly on trying to increase the quality or quantity of flow experiences. Moreover, even though the aforementioned studies, among a number of others, have highlighted some of the benefits of flow, these remain only a fraction of the hypothesized benefits of flow experiences (cf. Csikszentmihalyi, 1990, 1997).

In this symposium, a cadre of researchers hailing from all over the globe will present work on interventions designed to increase daily flow experiences and expand the evidence-based catalog of benefits that can result from flow experiences. A Danish team will present an intervention aimed at improving work life by increasing opportunities to experience flow at work by highlighting awareness of the construct and likewise the factors that are conducive to flow experiences for any given individual. A UK-based collaboration will show research on the physiology of flow and its correlates with positive emotions and experiences. An American study will review the efficacy of an intervention to plan for flow experiences during unexpected interstitial time compared to planning for non-flow experiences, which in turn has implications for the relative value, effects, and appropriateness of [non-flow] leisure and flow-type experiences. The last presentation is a Netherlands-based series of qualitative and quantitative studies that connect specific aspects of team dynamics (e.g., mutual trust) with team flow and show how team flow has a positive effect upon near-term and long-term outcomes (e.g., higher performance and higher well-being, respectively) at the team and individual levels. All four presentations will review further implications for how people can find increased quality and quantity of flow in daily life across a range of contexts, and the types of benefits that they can reap for putting in the effort to find flow.

#### **Presenters**

1. Borgholm, H.S., & Andersen, F.Ø. (frans@edu.au.dk)
2. Tan, J.W.R. (ps301jt@alumni.gold.ac.uk), & Bhattacharya, J.
3. Davis, O.C. (odavis@qllab.org)
4. van den Hout, J.J.J. (j.j.j.v.d.hout@tue.nl)

## PRESENTATION 1

**Feasibility of Using Flow Interventions in an IT Company***Frans Ørsted Andersen<sup>1</sup>\*, Hans Schmidt Borgholm<sup>1</sup>*<sup>1</sup>Department of Education/Aarhus University, Denmark, \*e-mail: frans@edu.au.dk**Keywords:** flow, well-being, ESM, short-scale

*Background:* For a manager or leader who truly cares about the bottom line in the broadest sense of the term, the first priority could be seen as to eliminate obstacles to flow at all levels in the organization and to initiate practices and policies that are designed to create well-being at work and make work enjoyable. In this study we present an intervention, that was designed to do that, along with the results of a survey using the ESM method, researching the effect of the intervention.

*Aim:* Aim of the study was to measure the amount of flow the initiative created among the employees.

*Method:* Presentation of the following key “flow” concepts, during 3 interventions: (i) Flow Short Scale, (ii). Flow, Flow Channel, Flow State Cycle, Flow triggers, and (iii). Co-Flow. Employees (n=6) completed a survey, using a survey tool three times a day (at 10 am, 12 pm, and 2 pm), leading to a total of 106 measurements (response rate 70%; validity grade 100%). It took an average 3 minutes to complete every survey.

*Results:* The results show that team of employees that participated in the surveys had obtained more flow at work due to the intervention. See figure

**Figure 1.**

Questions asked in the survey	Flow Inv.1 (No. of Surveys = 45)	Condition	Flow Inv.2 (No. of Surveys = 30)	Condition	Flow Inv.3 (No of Surveys = 31)	Condition
Q1: I feel just the right amount of challenge...	5.13	Flow	5.63	Flow	5.35	Flow
Q2: My thoughts/activities run fluidly and smoothly...	5.13	Flow	5.37	Flow	5.10	Flow
Q3: I do not notice time passing...	5.47	Flow	6.10	Flow	5.87	Flow
Q4: I have no difficulty concentrating...	4.80	Engaged	5.43	Flow	5.39	Flow
Q5: My mind is completely clear...	4.47	Engaged	5.23	Flow	5.13	Flow
Q6: I am totally absorbed in what I am doing...	4.76	Engaged	5.47	Flow	5.19	Flow
Q7: The right thoughts/movements occur of their own accord...	4.89	Engaged	5.27	Flow	5.29	Flow

Questions asked in the survey	Flow Inv.1 (No. of Surveys = 45)	Condition	Flow Inv.2 (No. of Surveys = 30)	Condition	Flow Inv.3 (No of Surveys = 31)	Condition
Q8: I know what I have to do each step of the way...	5.11	Flow	5.67	Flow	5.29	Flow
Q9: I feel that I have everything under control...	4.96	Engaged	5.53	Flow	5.26	Flow
Q10: I am completely lost in thought...	3.07	Engaged	3.97	Engaged	4.65	Engaged
Q11: Compared to all other activities, which I partake in, this one is...	4.64		5.33		5.65	
Q12: I think that my competences in this area is...	7.16		7.43		7.23	
Q13: For me personally, the current demands are...	4.71		4.87		5.45	

Note: The score is a mean score in the range from 0 to 10 – above 5 you are experiencing Flow (Q1 to Q10).

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## PRESENTATION 2

### Interoception in Musicians' Flow

*Jasmine Tan*<sup>1</sup>\*, *Joydeep Bhattacharya*<sup>1</sup>

<sup>1</sup>Department of Psychology, Goldsmiths, University of London, London, United Kingdom,

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**Keywords:** flow, musicians, interoception, EEG, heart-evoked potential

*Background:* Flow is a state in which an individual is intensely engaged with a skill-matched challenging activity and the experience is intrinsically rewarding. People often report a different bodily sensation during flow, most commonly a sense of effortless movement and a merging of action and awareness. However, the nature of interoception, i.e. how the brain perceives sensations originating from within the body, during flow has yet to be characterized, and may differ from non-flow experiences.

*Aim:* We investigated the degree of interoception in musicians' flow experience (relative to non-flow experiences) by the heartbeat-evoked potential (HEP), an event-related potential (ERP) reflecting cortical processing of the heartbeat.

*Method:* 40 musicians were instructed to play a self-selected musical piece that did induce flow. Further, they also played two other self-selected musical pieces that did not induce flow but were matched with the flow-inducing piece either in challenge (non-flow equal challenge) or in liking (non-flow equal liking). These non-flow inducing pieces were selected to differentiate the contributions of two different aspects of flow, namely that it involves a challenging task matched to the player's ability and it is also an experience that is intrinsically rewarding. EEG and ECG signals were continuously measured. The HEP was extracted in the period immediately after musicians stopped playing, and subsequently compared across the three conditions. EEG oscillations were also examined to see if they modulate the HEP.

*Results:* The HEP differed notably between the three conditions. The ERP averaged over the left frontal electrodes showed a relatively broad waveform with a negative polarity at 200ms to 600ms after the R-peak. The HEP in the flow condition is the most negative while the HEP in the Non-flow equal liking and Non-flow equal challenge conditions are smaller in amplitude and more positive in the same time window. Comparing the two non-flow states, the HEP was more negative for non-flow equal challenge at the earlier latency but equal liking became more negative at the later latency, after 280 ms. This may indicate the contribution of positive emotion to the HEP response in flow later in the HEP time course. As more negative HEPs are usually associated with better interoception, these results suggest that flow is linked with stronger interoception. There was a strong lateralisation effect. The HEP did not differ very much between conditions in the right hemisphere. This could be attributed to the dominance of the right hemisphere in processing the emotion in the music played[1].

*Conclusions:* We demonstrate that the cortical processing of heartbeat is significantly modulated by the flow experience in musicians, providing a novel insight into the brain-body interaction during flow. The results open the possibility that positive emotions may be connected to having a better sense of one's body, and likewise that flow may be a physiologically unique experience.

### **Acknowledgments**

This work has been funded by the Economic and Social Research Council UK.

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### PRESENTATION 3

## Finding Flow and Microflow in Daily Life

*Orin C. Davis*

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**Keywords:** flow, microflow, leisure

Although flow is an optimal experience, it does not show up that often, and some people do not experience flow at all. In order to change this, the literature is developing increasingly precise conceptions on the nature of flow and its components (e.g., Jackson & Eklund, 2004; Løvoll & Vittersø, 2014), the antecedents and contexts in which flow occurs, and even the range of flow experiences. As researchers understand the phenomenon with greater depth and precision, it becomes possible to develop interventions aimed at increasing flow in daily life. Because of the complexities of the deep flow experience, it may be difficult to create the requisite context on a daily basis even as theory has suggested that finding microflow experiences may be readily accomplished (cf. Davis, 2010).

This presentation will show the results of a study that involved an intervention designed to increase opportunities for microflow experiences in daily life, comparing the quality of those experiences to non-flow leisure and non-flow tedium. The positive effects of microflow and [non-flow] leisure will be discussed, along with the difficulties of differentiating between microflow and non-flow leisure experiences. Implications for the value of planning for short microflow and/or leisure activities during the day will be discussed, along with the study's results highlighting the feasibility of doing so.

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**PRESENTATION 4****Defining and Assessing the Nature of Team Flow***J.J.J. van den Hout<sup>1</sup>, Orin C. Davis<sup>2,3</sup>*<sup>1</sup>Technical University of Eindhoven, Eindhoven, The Netherlands<sup>2</sup>Quality of Life Laboratory, New York, United States<sup>3</sup>New York Institute of Technology, New York, United States**Keywords:** flow, team flow, group flow, team dynamics, teamwork

Despite the noted potential for team flow to enhance a team's effectiveness, productivity, performance, and capabilities, studies on the construct in the workplace context are scarce. Most research on flow at the group level has been focused on performance in athletics or the arts, and looks at the collective experience. But, the context of work has different parameters, which necessitate a look at individual and team level experiences. In this review, we extend current theories and essay a testable, multilevel model of team flow in the workplace that includes its likely prerequisites, characteristics, and benefits. We developed and tested the Team Flow Monitor as an instrument to assess team flow and related scores on the Team Flow Monitor to individual-level and team-level work outcomes. The empirical findings of 110 teams (student project teams and real-world business teams) support the operationalization of team flow as a second-order model that consists of two factors. Moreover, team flow related positively to positive work experiences, subjective well-being, and team effectiveness. These findings suggest that team flow can thus serve as an important indicator in the management of work teams.

## Symposium

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### *Positive Education Around the Globe*

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**Chair:** Åse Fagerlund

#### STUDY 1

### **Strength, Joy and Compassion – Enhancing Well-Being in Finnish Children**

Åse Fagerlund<sup>1\*</sup>, Mari Laakso<sup>1,2</sup>, Anu-Katriina Pesonen<sup>2</sup>, Johan Eriksson<sup>1,3</sup>

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**Keywords:** positive education, well-being, children, parents, educators

*Background:* If we want to affect and enhance the well-being of children, it is an important question on whom we should focus the intervention. For school-aged children (7-12 years) the most important and influential people are still their parents. There are also other important adults around them (like school staff) as well as peers influencing their development and well-being. Another important question when designing an intervention aiming at enhancing well-being concerns the requirements for attaining lasting change. Meta-analyses from school studies point to better effects from studies lasting a whole school year compared to shorter studies [1]. Better results may also be attained when focusing on a broad spectrum of skills [2]. Finally, a change in well-being is not always easy to delineate. Traditional forms of evaluation like questionnaires can pose a challenge for children in reliably describing changes in mood over a period of time.

*Aim:* The main aim of the Strength, Joy and Compassion project is to enhance child well-being through new research and methods in positive psychology. We aim to explore whether the best routes to achieve this aim goes through parents, other important adults in the lives of children (school-staff) or through directly training the children themselves and their peers in methods of well-being.

*Method:* Three separate studies are carried out:

Study 1) Flourishing families (N=60). Eight-week parental groups to enhance parental well-being and, subsequently, the well-being of their children. Design: wait-list RCT.

Study 2) Positive education (N=154). A whole school year project to enhance the well-being of students in middle school (11-12 year olds). Design: clustered RCT.

Study 3) Positive school (N= 260). A whole year school project to enhance the well-being of school-staff and, subsequently, the well-being of their students. Design: clustered RCT.

All studies are evaluated before and after the interventions with an extensive set of measures including web-based questionnaires, experience sampling of daily life (mood, flow, coping etc.) as well as with physiological measures (heart rate variability and salivary samples of cortisol).

*Results:* Studies 1-3 have been carried out during 2016-2018 in different regions in southern and western Finland. Content, outline and implementation will be presented along with initial results.

*Conclusions:* Results will be discussed in the light of the overall question of how to best reach and enhance the well-being of children.

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## STUDY 2

### Resilience Interventions in Schools

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**Keywords:** resilience, intervention, culture, academic achievement

*Background:* Resilience refers to the capacity of individuals to navigate towards resources that are available in order to sustain their wellbeing and negotiate with those resources in culturally meaningful ways (Ungar, 2008; Ungar, 2011). Strong evidence from literature suggests the role of culture in shaping resilience thereby reiterating the need for culturally relevant interventions for building resilience. The presentation here is an attempt to provide a brief overview of a few innovative studies carried out in schools to build resilience among adolescents at-risk. Two studies that have attempted to build resilience among adolescents at-risk using different experimental designs will be presented and discussed. Both these studies have attempted to build resilience in similar target but with different focus. The first study focused on improving competencies covering various domains like academic, emotional and social at an individual level. The second study focused on reading skills and building resilience strengths using peer mentors.

#### Study #1

*Aim:* To develop evidence-based psychological intervention program for improving competencies to facilitate developmental adaptation in adolescents at-risk

*Method:* A sample of 133 students from low socioeconomic background studying in rural schools participated in this pre-post-follow up with control group experimental study. The intervention specifically focused on improving academic, emotional and social competency. Study skills, academic help-seeking behavior, academic motivation, academic self-concept, self-awareness, emotional self-regulation, communication skills, interpersonal skills, flexibility in perspective taking, self-management, and conflict tolerance were the specific elements of the intervention. Self-report measures and marks obtained by the participants in the school exams were used to evaluate the efficacy of the intervention.

*Results:* Mixed Models ANOVA with Group, Time, and Gender are the three factors were used to analyze the data. Significant improvement with intervention was seen only in academic competency and not in social or emotional competencies.

#### Study #2

*Aim:* To study the efficacy of story-making intervention in improving reading skills and psychological resilience among adolescents at-risk.

*Method:* A single group pre-post-follow-up design was used. The study was conducted in two phases. In Phase I, a set of at-risk but resilient students was identified and was provided training to be mentors. In phase II, the mentors imparted intervention to enhance resilience and reading skill among a set of at-risk adolescents, the mentees. A sample of 30 peer mentors

and 100 mentees participated in this study. All the participants were from low socioeconomic background studying in rural schools run by the government. Self-report measures were used to measure school engagement, academic self-efficacy, conscientiousness, perceived social support, internalizing and externalizing problems. Reading skills were also assessed using a test specially developed for use in the present study.

*Results:* The pre-test and post-test scores were compared using t-test. Findings show that academic achievement, internalizing and externalizing problems improved with intervention. Story-making intervention is effective in improving internalizing and externalizing problems, and reading skills. Reducing problems can have a cascading effect on academic performance.

*Conclusion:* School-based interventions to enhance resilience among adolescents at-risk appear to be effective in improving academic competency and academic achievement. First study that focused on improving interpersonal skills within classroom by methods like exercises and role-play did not actually result in any significant improvement in social skills. On the other hand, using peer mentors to deliver the interventions provided scope for the adolescents at-risk to network with those 'similar' to them that enhanced their social capital. Story writing and peer mentoring have a positive effect on resilience among the participants. Interventions at individual level delivered to the participants directly appear to have limited advantage. On the other hand, multilevel interventions that involve one other or several people in the real lives of these at-risk adolescents appear to be more beneficial resulting in more positive effects across various domains compared single-level interventions that do not involve others from the real lives of the participants. This could be pointing towards a need for multilevel interventions in order to make significant improvement in resilience among adolescents at-risk.

### **Acknowledgments**

The research studies presented have been carried out with grants from Indian Council for Social Science Research (Study#1) and National Council for Educational Research and Training (Study#2).

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### STUDY 3

## Positive Education from Preschool to High School: The Maytiv Program in Israel

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**Keywords:** school, preschool, positive education, mental health, wellbeing

*Background:* Israel is considered to be a field laboratory for the empirical study of topics related to stress and trauma. At the same time, research has relied on the insights and knowledge coined in positive psychology in order to develop effective interventions against stress-related emotional problems. As a result, Israel is characterized by unprecedented surge of research and implementation of positive psychology in the educational system. One outstanding example of these positive psychology interventions is the Maytiv program for teachers and students in kindergarten and elementary, mid-level, and high-level schools [1,2,3]. This program was developed by the Maytiv Center (Hebrew for "doing good"), an international academic center for research and practice in positive psychology, and has served over 5,000 teachers and 200,000 children and adolescents in the Israeli educational system during the last seven years.

*Aim:* The present session presents the core components and goals of the Maytiv program, and two evaluation studies that examined the effects of the program on subjective well-being and learning behaviors of pre-school and school students from eight schools and 12 pre-schools in Israel.

*Method:* In the first study, 1800 middle school students in 50 intervention classrooms participated in a one-year positive-education intervention program and were compared to 1756 students in 50 control classrooms. In a two-year longitudinal repeated measures design, the studies assessed pre- to post-test modifications in the targeted factors. In the second study, 12 classrooms of 3-6.5 year-olds were randomly assigned to a positive psychology intervention condition or a wait-list control condition. In the intervention condition, during one school year, 160 children experienced eight modules of basic concepts in positive psychology that were adapted to the developmental characteristics of young children and were compared to 155 children in demographically similar control classrooms [3].

*Results:* The school intervention strengthened mental health, self-esteem, self-efficacy, school engagement and academic achievements. In the preschool program, the findings showed significant increases in subjective well-being and positive learning behaviors among the intervention participants, with no significant changes in the control group.

*Conclusions:* The results highlight the potential of positive psychology interventions for increasing subjective well-being and a positive approach to learning both at young ages and during adolescence.

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## STUDY 4

# Planning School Wellbeing: A Standardised Process That Produces Customised, Contextualised Plans

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**Keywords:** whole school wellbeing planning, strengths-based planning, appreciative inquiry, contextualised plans, staff buy-in

Schools world-wide are adopting wellbeing as a goal and implementing wellbeing programmes [1]. It is increasingly easy to learn about positive psychology but for many educational leaders, however, creating and implementing their own wellbeing plan remains a challenging process. They must select from a wide range of topics and strategies and identify where modifications for school context are necessary. Although Robinson's Road Map for schools embarking on wellbeing change provides valuable guidelines [2], wellbeing planning continues to challenge educational leaders. We have developed a wellbeing planning process and toolkit that responds to schools' requests for this assistance. This process supports schools to plan and implement effective wellbeing strategies that: acknowledge and build on existing strengths; earn staff buy-in and engagement; and reflect school culture, values and priorities. This process builds on Robinson's roadmap for wellbeing change and is consistent with best practice principles for effective wellbeing programmes and initiatives [3]. It offers wellbeing change principles and tools consistent with a strengths-focused and appreciative approach. These include a *wellbeing audit* designed to focus on and acknowledge existing school practices that support wellbeing as these constitute the foundations future change will build on. Another key tool is the *wellbeing inquiry*, used to build staff buy-in, identify a shared vision and agree actionable priorities supported by staff. This process has enabled schools to cut through the myriad of possible wellbeing strategies to develop plans that build on strengths, engage staff and reflect school culture and priorities. School focus on their strengths, clarify vision, establish priorities that engaged stakeholders have proposed, generate enthusiasm for wellbeing change, and support staff cohesion and pride in their work. This wellbeing change model offers a standardized process that gives rise to customized and contextualized plans created and supported by staff.

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## STUDY 5

**Positive CV – an Innovative Tool to Document Results of a Strength Education Intervention**

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**Keywords:** personal strengths, positive education, intervention study, strength identification measurement

*Background:* Positive education focuses on teaching skills of well-being and making strengths visible in every learner (e.g. Seligman et al. 2009). Well-working strength education programs need to be developed and tested in various settings. Most of all, the outcomes of these programs and interventions deserve to be revealed in detail. For this purpose, we have created *Positive CV* (PCV), a self-reportive tool to document and assess the effectiveness of strength education interventions (see Figure 1).

*Aim:* The current paper has two aims; (a) to introduce PCV, a tool for personal strength identification, and (b) to present a structured strength-based intervention in Finnish inclusive classrooms with a variety of learners.

*Method:* Our strength education intervention took place in three urban compulsory schools in Southern Finland. Two sixth (age 12-13 years) and two ninth (age 15-16 years) grade classes from three schools comprised the intervention group ( $n=73$ ). Each of the four classes had a matching control group from the same schools ( $n=58$ ). The curriculum-embedded 5-week intervention consisted of 90 min lessons given once a week. The lessons encouraged students 1) to identify their personal strengths in four different contexts (school, home, hobbies, with friends), 2) to ask for feedback about their strengths usage and 3) to find new ways to use their personal strengths. A traditional pre-test - post-test protocol with a battery of quantitative measures was applied. However, in this particular paper we present the new, qualitative data collection method, PCV.

PCV was used as a tool for a two-way data collection through the intervention. For example, the students documented their good qualities and successes at home in the PCV poster. The family members gave feedback to the students, confirmed and complemented their remarks. Furthermore, the students were taught how to respond to the family feedback in a strength-based way. Mobile phones were used as a help to collect information from all parties involved in the intervention. As an end result of the intervention each student had their *proximal zone of strengths* made visible in the PCV poster.

For data analysis, the number of positive notifications (e.g. strength words) in a poster was coded and categorized. Additionally, students were interviewed to get a deeper insight into the qualities that were present in their posters.

*Results:* The explicit teaching of strength identification, strength usage and feedback giving showed in a multitude of information in form of text and images. The interviews confirmed increased understanding of one's capabilities and growth potential.

*Conclusions:* The findings suggest that PCV is a well-working tool for both continual documentation and self-assessment of strengths. The extensive usage of strength words and other positive comments encourages us to further develop PCV. At the moment, a digital PCV platform is under construction.

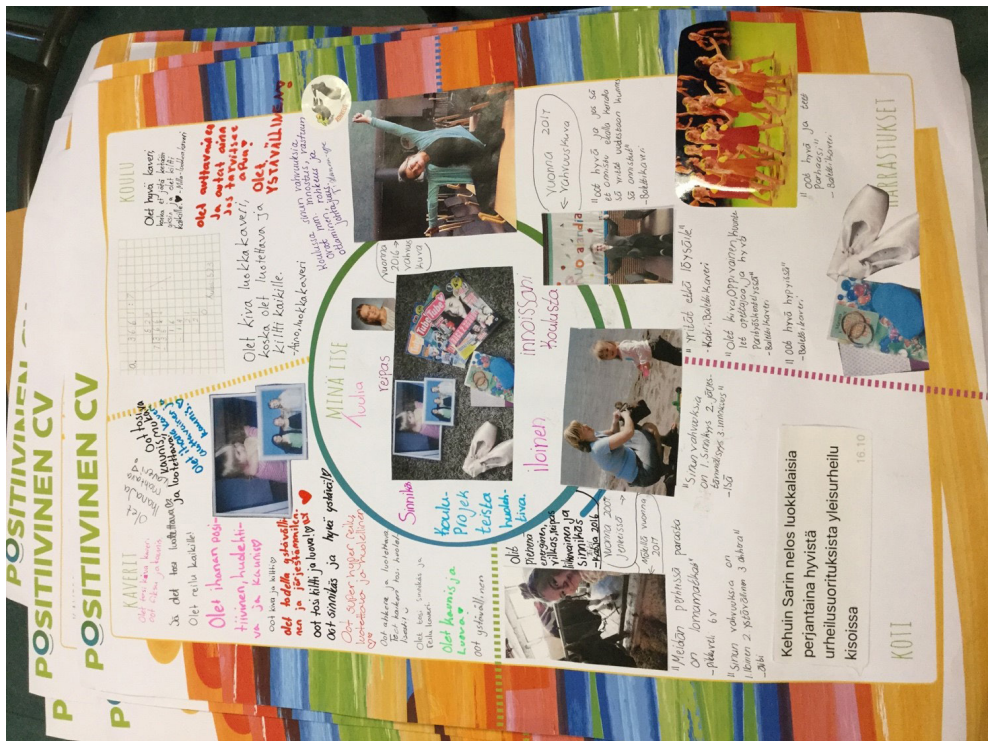


Figure 1. A PCV poster

**Acknowledgments**

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## Symposium

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### *Systems Informed Positive Psychology*

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**Symposium Chair & Discussant:** *Margaret L. Kern*<sup>\*</sup>

**Presenters:** *Paige Williams*<sup>1</sup>, *Rachel Colla*<sup>1</sup>, *Andrea Downie*<sup>1</sup>, *Lindsay G. Oades*<sup>1</sup>

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### Symposium Overview

**Keywords:** systems science, interdisciplinary research, integration of research and practice, education, wellbeing

Positive psychology (PP) focuses on understanding and building optimal function in individuals, organizations, and broader communities. Over the past two decades, the field has experienced rapid growth; developed numerous publications, programs, and interventions; spread across disciplines; and impacted policy and the general public. Despite these successes, the field has been criticized for ignoring the impact of context and life experiences, incorporating circular reasoning and tautological assertions, and numerous other criticisms. PP interventions are beneficial for some people, some of the time, in some places, and in some ways, but are far from a panacea. Theories and models are increasingly becoming more nuanced and sophisticated, but we suggest that for PP to mature as a science, it needs to move beyond constraints imposed by traditional approaches.

Systems science is an interdisciplinary field that studies the nature of systems in nature, society, and in science itself. It emphasizes dynamic interrelationships over time, multiple perspectives, boundaries, complexity, feedback, consequences, dynamic associations, and constant change. The field has developed a range of tools that can be used to understand and address the complexities of human life. We suggest that infusing positive psych with systems aspects – an approach that we call Systems Informed Positive Psychology (SIPP) – can enable PP to more effectively address the wicked challenges of the real world.

In this Dr Paige Williams first provides background on systems science and highlights how systems concepts can potentially be applied within positive psychology to create benefit. Rachel Colla and Andrea Downie present examples of SIPP in action, providing striking examples of transformation. Then, Professor Lindsay Oades considers the philosophical underpinnings of SIPP, challenging even our own assumptions. Bringing these presentations together, Dr Margaret Kern will foster a discussion on the implications of SIPP for the future of positive psychology.

### Acknowledgments

We'd like to acknowledge Cass Spong, Sonia Sharpe, and Ash Buchanan for their contributions in developing the ideas and methods presented in this symposium. We present this symposium in honour of Dr Christine Siokou, who was pivotal in the development of this work and continues to inspire us all.

## **Transforming Well-being Science: Systems Informed Positive Psychology**

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**Keywords:** systems science, interdisciplinary research, theory, well-being, communities

Over the past several decades, science and practice within the field of positive psychology has considerably advanced our understanding of how to define, measure, and build wellbeing and other positive outcomes in individuals, organizations, and broader communities. Among the psychological sciences, it is one of the most applied areas, appealing to researchers, professionals, policy makers, and the general public. However, positive psychology has also been criticised for being individually biased and decontextualized, making it ineffective in addressing the many complexities that practitioners deal with on an everyday basis. When taken to scale, positive psychology interventions are often ineffective at best, and harmful at worst.

Systems science is an interdisciplinary field that has long tackled challenging real-world issues. It acknowledges complexity, multiple perspectives, dynamic and non-linear relationships, context, constant change, and unintended consequences. It has developed a range of tools that can be used to understand and address problems, while acknowledging the complexities of human life.

Systems approaches look very different than the reductionist experimental studies that provide the foundation for positive psychology research. We suggest that if positive psychology is to mature as a field, a systems-informed approach is a necessary evolution of current research and practices, which will lead to frameworks, tools, and applications that generates pathways toward yet unimagined futures. We call this alternative approach Systems Informed Positive Psychology (SIPP). SIPP brings together the strength-based lens of positive psychology with the complex, holistic lens of systems science, with the goal of enabling and supporting change that cultivates the wellbeing of not only individuals, but of human social systems. This presentation introduces SIPP, illustrating foundational systems principles, and opening an interdisciplinary conversation that explores how a systems informed approach to positive psychology can transform the science of wellbeing.

## Hope Labs: Taking a Systems Approach to Adolescent Thriving

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**Keywords:** hope, 21<sup>st</sup> century skills, systems, adolescence, purpose

*Background:* Students today face many challenges as they prepare to leave school and transition to further study or work, including a rapidly changing world. We spend significant time as educators preparing them for ‘what’ they want to do, but little time is dedicated to discerning ‘who’ they want to be. Discovering what matters most to students allows them to develop a strong sense of identity and purpose, which can spark hopeful action [1]. However, for a lot of young people, the search for meaning is pulling them apart rather than leading them to a sense of purpose. This calls for a more innovative approach in helping our young people discover who they want to be.

Research suggests that the less we think about ourselves, the better we become [3]. Thus, the challenge is to move beyond an individual perspective to a more holistic systems perspective. Optimal functioning arises from complex and interactive processes, predispositions, and experiences [2], which occur within nested ecological systems.

*Aim:* Using an eco-system approach, this study assesses a pilot intervention that integrates meaning and hope theory to allow students to develop a sense of hope, positive identity, purpose, and self-efficacy to contribute to their community.

*Method:* A 7-module program was designed to develop 21<sup>st</sup> century values and skills through project-based learning. The program utilises best practice from neuroscience, design thinking, wellbeing science and systems thinking to guide students through the development of awareness, empathy, insight and purpose. Students build these skills through action (locally or globally) in designing a project to address the United Nations Sustainable Development Goals. The program will be evaluated using mixed methods.

*Results:* It is expected that the program will increase goal-directed energy (agency), pathway thinking to meet goals, and enhance the students’ sense of meaning. Additionally, focus group interviews exploring the impact of systems thinking and community contribution will be presented.

*Conclusions:* Integrating advances in hope and self-determination theories, together with an eco-system approach, may create a unique opportunity for positive identity development, which enables students’ commitment and efforts to soar and build a brighter future for them and for our communities. Additionally, examining this within an eco-system approach can enable a more holistic analysis that can better help students navigate a successful transition to young adulthood.

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## The Green School: A Systems Approach to a Thriving School

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**Keywords:** systems science, positive psychology, education, pedagogy, future curriculum

*Background:* Many Australian mainstream schools are social and emotional learning heavy, and positive education is becoming popular across the country. Yet concerns over mental health continue to rise. In contrast, the Green School in Bali, Indonesia has been called a best practice school of the future. It values character education and learning skills, and successfully is enabling students, staff, and the local community to thrive.

*Aim:* To identify key ingredients that have made the Green School a thriving community, and to determine aspects that might be adapted to the Australian context to better support student wellbeing.

*Method:* We combine comparative analysis with a case study that follows a group of Australian principals as they visit the school. We first identify the pedagogical practices and curriculum design of the Green School, contrasting the design and practices with current practices in mainstream Australian schools. Then, an Australian network of Principals who are currently working to incorporate positive education into their schools will spend a week immersed within the Green School. Their experiences and insights will be analysed using mixed methods.

*Results:* The Green School was designed using a systems approach, and many positive psychology principles were unintentionally fused throughout the School's design. It is collaborative in nature, emphasising community and contribution. In contrast, many approaches to positive education in Australia are siloed, primarily target individuals, and prioritise specific interventions and programs over more holistic preventative approaches to wellbeing. While many of the practices would fail in the Australian culture, the underlying fusion of systems approaches with positive psychology principles has potential.

*Conclusion:* The Green School provides a living example of Systems Informed Positive Psychology in action. The success of the school suggests that a systems science approach to positive education can inspire, equip, and transform current school systems to create thriving communities of well-being, equity, and purpose.

### Acknowledgments

We'd like to acknowledge the courage and commitment of the Geelong Principals Catholic Primary Principals Network for undergoing a transformational journey and their willingness to share their experiences and perspectives.

## Beyond Liberalism: What can Systems Informed Positive Psychology Learn from Political Philosophy and Sociology?

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**Keywords:** systems science, positive psychology, liberalism, political philosophy, communitarianism

*Background:* Systems informed positive psychology (SIPP) aims to use insights from systems science to enrich the science of positive psychology and its applications. One critique of positive psychology, and perhaps psychology more broadly, is that it is too individualistic and does not place the person in their broader societal context and system. An array of theories within positive psychology assume the individual level of analysis, but also involve agency and autonomy as key components, potentially predicting wellbeing. The emphasis on agency is often critiqued by sociologists, forming part of the longstanding structure-agency debate. The debate between individual rights versus those of the broader society is longstanding within both political philosophy and sociology. For this reason, these disciplines are likely to be informative for systems informed positive psychology which seeks to broaden the focus of positive psychology using a systems framework.

A key contraction within aspects of positive psychology and wellbeing science is that the conceptual apparatus often implies a form of liberal individualism championing autonomy and agency as necessary conditions for personal wellbeing. This is unsurprising, given that most of positive psychological research has occurred in the US, a nation which champions individual liberty. However, the empirical literature consistently demonstrates the importance of strong social relationships and a sense of belonging and need for social inclusion.

*Aim:* To learn from other disciplines that have critiqued views of human systems that emphasise individual approaches and individual liberty.

*Method:* The work of John Stuart Mill [2] on *liberalism* (an approach which champions individual freedom) is contrasted with the work of Amitai Etzioni [1] on *communitarianism* (an approach which seeks to balance individual freedoms and community) in the context of promoting wellbeing and linking to system science conceptualization.

*Conclusion:* Systems based approaches to wellbeing and positive psychology, if seeking to go beyond individualism will usefully learn from political philosophy and sociology to inform its assumptions about human systems.

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## Symposium

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### ***The International Hope-Barometer Research Project: New Empirical Findings***

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#### **The Virtuous Circle of Hope: Results and Conclusions from the Hope-Barometer Research Project**

**Chair:** *Andreas M. Krafft*

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**Keywords:** perceived hope, human virtuous, positive emotions, eudaimonia

*Background:* The most diffused theory of hope understands hope as a goal-oriented cognitive, motivational and self-centred disposition [1]. Other authors recognize hope as a human virtue necessary for man's psychosocial development [2] and underline the emotional and transformative character of hope with the effect of fostering personal growth and well-being [3]. Even though hope is a universal human phenomenon, its concrete experience and expression are quite culture specific [4]. There is still an open issue as to how to assess hope in order to gain access to individuals' own understanding and level of hope [5].

*Aim:* The main purpose of this study is to assess the character, the elements and levels of hope as reported by the German speaking population. Furthermore, we want to study the interrelations between the many different elements of hope and the general level of hope. Based on these results, conclusions can be drawn about the general nature of hope.

*Method:* The Perceived Hope Scale (PHS) is a short measure for targeting hope in a direct manner [6]. Further instruments for the assessment of different dimensions of hope are: (1) targets of hope, (2) activities performed to attain the targets hoped-for, and (3) hope providers people count on. The Hope-Barometer is a cross-sectional internet survey. For this study we use original data from the 2017 data collection (N=3306). Data will be analyzed using descriptive statistics and multiple regression coefficients.

*Results:* Regarding the 17 targets of hope, the significant predictors of Perceived Hope at  $p < .001$  turned out to be: (1) helping other people ( $\beta = .13$ ), (2) religious and spiritual experiences ( $\beta = .11$ ), (3) a happy family ( $\beta = .12$ ), (4) meaningful tasks ( $\beta = .09$ ), (5) personal health ( $\beta = .16$ ), and (6) good personal relationships ( $\beta = .07$ ). Hedonic oriented hopes like more time to relax, more spare time, more sex, and more fun with friends were not significant. Using the 16 hope providers as predictors, the three significant predictive ( $p < .001$ ) items of Perceived Hope are: (1) I give myself hope ( $\beta = .29$ ); (2) God ( $\beta = .15$ ); and (3) Wife, husband, partner ( $\beta = .10$ ). With the 13 items of activities to fulfill one's own hopes, six activities had a significant predictive power regarding hope (at  $p < .001$ ): (1) I take responsibility ( $\beta = .19$ ); (2) I motivate my family ( $\beta = .12$ ); (3) I trust God ( $\beta = .12$ ); (4) I talk with my spouse/partner ( $\beta = .10$ ); (5) I motivate my friends ( $\beta = .07$ ), and (6) I pray and meditate ( $\beta = .06$ ).

*Conclusions:* In analogy to Ryan, Huta and Deci's [7] first- and second-order goals, we suggest to differentiate between first- and second-order targets and sources of hope. First-order targets of hope belong mainly to the eudaimonic domain and nurture the general level of hope, while other life domains related to hedonic experiences seem to have no relation at all with the perception of hope. The fundamental conclusion is that the eudaimonic aspects in life are the main sources of hope and at the same time the most important targets of hope, giving rise to a mutually reinforcing virtuous circle of hope.

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## Sources of Hope Similarities and Differences across Different Cultures: A Cross Cultural Comparison between German, Spanish and Indian Adults

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**Keywords:** hope, sources of hope, cultural differences

*Background:* Snyder's hope model and his *Dispositional Hope Scale* [1] have been validated in so many countries and languages. However, there seems to be a scarcity of studies that have compared the possible cultural differences in hope. One of those possible cultural differences is concerned with the sources or locus of hope (2). Hence, it could be interesting to explore and highlight possible cultural differences in manifestation and expression of hope in comparing cross-cultural and socio-demographic aspects for three different cultures viz. Germany, Spain and India.

*Aim:* The main goal of this study is to explore the possible cultural differences in the locus of sources of hope as Bernardo's [2] extension to Snyder's hope model while exploring the similarities and differences between the chosen countries.

*Method:* For this study we employed data from international Hope Barometer survey collected in November 2017. Data were obtained through an online anonymous questionnaire. The sample consisted of 90 Spanish and 121 German and 112 Indian adult respondents balanced by age. We used *Adult Dispositional Trait Hope Scale (ADTHS)* (2), Snyder et al., 1991 and the *Perceived Hope Scale (PHS)* [3]. Besides, we used two questionnaires to assess the sources of hope. Data was analyzed via descriptive statistics, and one-way ANOVA.

*Results:* We found significant differences between Spanish, German and Indian respondents with respect to sources of hope and in hope activities, according to Bernardo's proposal. However, we did not find significant differences in ADTHS between the three countries.

*Conclusions:* The analysis support Bernardo's statement that people have distinct sources of hope different to oneself and other people could also be relevant sources of hope. Our results also shows that there are cultural differences in the sources of hope chosen by people, those differences could be due to differences in some cultural aspects like collectivism vs individualism including, socio-political and economic situations.

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## Psychosocial Predictors of Perceived Hope Across Cultures: A Study Of Czech and Maltese Contexts

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**Keywords:** hope, optimism, loneliness, spirituality, generativity

*Background:* In view of the globalised nature of today's world in which many cultural differences are fading away, we find it interesting to explore whether and to what extent there are differences in hope levels between two nationalities that are culturally relatively similar, yet differ in many respects. Although both the Czech Republic and Malta are developed European countries, they differ in terms of history, socio-economic background, culture and language. Thus, we assume that there might also be differences between Czech and Maltese populations in the psychosocial determinants of perceived hope.

*Aim:* As the concept of perceived hope is relatively new [1], the main aim of the study was to investigate whether it is more related to social factors (positive relations, loneliness), dispositional characteristics such as positive mindset (dispositional optimism), or self-transcendent resources (spirituality, generativity), and whether the role of these resources varies across the two countries. Secondly, it was to investigate whether there are significant differences in the levels of above variables among Czech and Maltese populations. We also addressed the question of whether there are any significant differences in the measured variables related to gender, age, family status, education level, and religious beliefs.

*Method:* For this study we employed data from international Hope Barometer survey collected in November 2015. Data were obtained through an online anonymous questionnaire and processed using IBM SPSS23. The sample consisted of 177 Czech and 90 Maltese respondents (108 male, 159 female, aged 18 to 79). We used questionnaires to measure perceived hope [1], optimism [2], positive relations [3], loneliness [4], spirituality [5], and generativity [6]. Data was analyzed via descriptive statistics, Pearson's correlation, multiple linear regression analysis, independent-samples t-test, and one-way ANOVA.

*Results:* Czech respondents scored significantly higher in perceived hope, optimism, and spirituality when compared to Maltese participants. No significant differences between the two samples were found in positive relations, loneliness and generativity. In the Czech sample, higher perceived hope was predicted by optimism ( $\beta=.516, p<0.01$ ), generativity ( $\beta=.192, p<0.01$ ), and loneliness ( $\beta=-.166, p<0.05$ ). In the Maltese sample the significant predictors were optimism ( $\beta=.547, p<0.01$ ) and spirituality ( $\beta=.186, p<0.05$ ). An analysis of the effect of demographic factors showed some interesting culture-specific differences.

*Conclusions:* The outcomes of the study showed that perceived hope seems to be related predominantly to dispositional characteristics such as an optimistic mindset, but, an important role is also played by self-transcendent resources and ability to maintain social relationships. In general, though, our results support the conceptualisation of perceived hope suggested by Krafft et al. (2017) [1].

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## Hope among South African Adults: Preliminary Findings from the Hope-Barometer Survey 2017

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**Keywords:** perceived hope, dispositional hope, optimism, cross-cultural differences

*Background:* Hope is an important positive psychological characteristic, associated with well-being. It can be viewed as a cognitive motivational construct and a dispositional trait [1] but also in terms of spiritual and transcendent aspects, or perceived hope [2]. In the South African context, characterized by culturally different population groups, rapid socio-political changes and economic uncertainty, research on hope warrants attention. While some studies investigated dispositional hope among South Africans [3], there is an absence of research regarding perceived hope.

*Aim:* Based on the results of the first Hope-Barometer survey implemented in South Africa, we examined satisfaction with important life domains in 2017, as well as future expectations regarding these domains. We further explored which life domains were important in terms of personal hopes and examined the relationship of hope with other positive characteristics. Finally, we investigated differences in hope among two culturally different groups, i.e. Black African and White (Caucasian) groups.

*Method:* Data was obtained online. The sample consisted of 414 adults (288 female, 126 male; mean age =39). The majority of the participants were White (58%) followed by Black Africans (34%). Questionnaires measured dispositional hope [4], perceived hope [1] and optimism [5]. Data was analyzed using descriptive statistics, correlational analyses and t-tests for independent samples.

*Results:* While most participants (50%) were rather satisfied with their personal life in 2017, the opposite was true for the economic and political situation. Similarly, while the majority (48%) were rather optimistic about their personal life in 2018, 40% were rather pessimistic about politics and the economy. The most important targets of hope for the sample were personal health ( $M=2.8$ ), being engaged with meaningful tasks ( $M=2.65$ ), personal independence ( $M=2.64$ ), good relationships ( $M=2.59$ ) and harmony in life. Dispositional hope, perceived hope and optimism were strongly correlated with each other, as well as with other positive characteristics. Levels of dispositional hope ( $M = 3.76$ ), perceived hope ( $M=3.99$ ) and optimism ( $M=4.45$ ) were relatively high for the whole sample. Several differences between Black and White participants emerged regarding hope in various life domains. Black participants scored higher on perceived hope while White participants scored higher on optimism ( $p \leq .01$ ).

*Conclusions:* This sample of South Africans seems to be relatively hopeful and optimistic. There were several statistically significant differences between Black and White groups in hope related to specific life domains. Further, differences in levels of perceived hope and optimism between the two groups emerged. Possible explanations for these differences will be discussed.

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## Symposium

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### *Caring Relationships in Organizations: Effects, Antecedents, and Related Mechanisms*

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**Chair:** *Shiri Lavy*

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Scholars have pointed to the crucial, dominant role of relationships in human lives. Stemming from evolutionary needs and imprinted in humans' biological conditions, relationships not only critically affect our health, well-being and functioning, but also motivate us, and function as a psychological resource enabling humans to face difficulties and pursue opportunities. However, despite their evolutionary and biological basis, relationships at work have often been studied from a somewhat limited perspective, focusing on their role as means for attaining power, status, or other tangible or non-tangible benefits, rather than as a fundamental need and a goal in their own right. This focus on relationships as means for promoting self-interest resulted in focusing on certain components and aspects of relationships - such as mutuality, exchange, authority etc. - while often overlooking other basic aspects of relationships' - such as relatedness, belonging, compassion, and caring (which have been widely discussed in other arenas, such as friendship or family literature). In the present symposium, we focus these somewhat neglected aspects of relationships in organizations, and present compelling evidence for their importance, as well as for mechanisms that can foster them in different ways and organizational contexts.

The symposium includes a unique, international, collection of presentations, providing new theoretical conceptualizations, as well as compelling empirical research findings:

The first presentation (to be presented by Johan Lataster from the Netherlands) describes a rigorous study, conducted with Experience Sampling Method (ESM), which demonstrates the critical effects of employees' sense of relatedness on their positive affect, physical well-being, and decreased negative affect, across workers of all ages. Acknowledging the importance of employees' sense of relatedness, the second presentation (lead by Miia Paakkanen from Finland) describes an intervention study, aimed to enhance managers' compassion. This quasi-randomized controlled trial study indicated that the suggested intervention decreased managers' fear of compassion, and increased their compassion and compassion skills, and had measurable positive effects on employees' perceptions of their managers. The third presentation (lead by Marianne van Woerkom from the Netherlands) provides a new perspective on team processes that may foster team-members' strengths use, and thus leverage team strengths and increase team members' motivation. The last two presentations focus on a specific kind of organizations: schools. The fourth presentation (lead by Eman Naama from Israel) explores the association of teachers' caring with student engagement, and examines teacher-related and student-related mechanisms underlying this connection. The fifth presentation (lead by Peggy Kern from Australia) provides a broad review and meta-analysis of students' sense of belonging in schools, and identifies factors and strategies that can enhance school belongingness.



## Momentary Well-being at Work: The Role of Relatedness

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**Keywords:** wellbeing at work, relatedness, gender, experience sampling method, ecological momentary assessment

*Background:* Well-being at work has received much academic attention. This is not surprising, given the fact that most adults spend a large part of their life working, and that their well-being at work accounts for a large part of the variation in their life satisfaction [1]. Also, employees who are happy perform better than their less happy colleagues [2]. Previous studies suggest that relatedness, referring to the sense of belongingness and connection with others [3], strongly predicts subjective well-being [4,5]. However, most studies have investigated the putative link between work relatedness and well-being cross-sectionally and retrospectively, possibly inducing recall bias and threatening ecological validity of measurements. Moreover, previous studies have concentrated exclusively on antecedents of differences in well-being between individuals, thereby neglecting the role of daily events and experiences that may cause intra-individual fluctuations in momentary states of well-being [6].

*Aim:* We aimed to zoom in on the level of daily-life work experience, and further elucidate the relationship between momentary feelings of relatedness (REL) and well-being, measured as the presence of positive affect (PA) and physical well-being (PHYWB), and the absence of negative affect (NA). Furthermore, we explored to what extent feelings of relatedness were equally important for well-being between men and women, across different age groups, and for people with high vs. low trait levels of mental health.

*Method:* We employed the Experience Sampling Method (ESM), a structured diary technique [7], by asking participants to provide systematic self-reports at 10 random moments during the day for 5 consecutive days through a smartphone application. Only self-reports completed while people were at work were selected for final analyses, resulting in a sample of 1069 self-reports nested within 103 respondents (64% female; Age(M) = 39 yrs).

*Results:* Multi-level regression analyses showed that momentary feelings of REL were strongly associated with momentary feelings of PA(+), PHYWB(+), and NA(-) at work. Furthermore, results suggested REL to be equally important for PA, PHYWB, and NA across workers of all ages, and with varying levels of mental health, but a more pronounced association was observed for women compared to men.

*Conclusions:* Our findings are in line with the self-determination theory which posits that all individuals, regardless of their mental health, gender and age, have an innate psychological need for a sense of mutual respect and reliance with others. The fulfilment of this need for relatedness is an important condition for their personal growth and psychological well-being [8]. Our findings regarding the moderating effect of gender are in line with the literature that suggests that women are more concerned with relatedness than men [9]. The ESM is a valuable method to capture daily-life momentary experiences as they play out on the work floor.

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## **Awakening Compassion in Organizations – Evaluating the Impact of a New Compassion Skills Intervention on Manager Compassion and Servant Leadership**

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**Keywords:** compassion, intervention, organizations, leadership, emotion skills

*Background:* Compassion has emerged as an important research topic within organizational research [1] as it has been shown that compassion carries various positive outcomes in organizations [2] [3] and that it can be trained [4] [5]. Still, surprisingly little is known about how compassion could be increased in organizations through interventions. Today, several compassion training programs have been developed and studied e.g. [6] [7] [8], but intervention studies that aim to explicitly foster and measure compassion, have mostly been studied among clinical or community populations [9] [10] [11] [7] [5]. Those few that have been studied in organizational context, have been meditation-based [4]. Given the demonstrated benefits of compassion in organizational context there is a clear need to learn more about the different ways compassion could be increased in organizations.

*Aim:* Accordingly, this paper presents the first non-meditation-based intervention study in organizational context to see whether compassion could be increased in organizations among managers through other means than meditation, namely, through a new in-depth compassion skills cultivation training.

*Method:* To examine this issue, we implemented a quasi-randomized controlled trial of the new in-depth compassion skills cultivation training versus a control condition among seven groups of managers in five different organizations, and measured the feelings of the managers (n = 141) and their followers (n = 157) before and after the intervention.

*Results:* The results showed that, compared to the control group, the managers exhibited decreased fear of compassion [12] and significantly increased sense of compassion [13] and compassion skills (new measure developed for this study). Also, the managers' sense of work engagement [14] improved significantly. Additionally, the follower-rated servant leadership [15] and autonomy support [16] showed improvement. Moreover, the illustrative feedback [15] from the trainings indicated that in addition to compassion, the responsiveness to others' positive emotions was especially important to the managers' sense of psychological safety.

*Conclusions:* These results suggest for the first time that compassion can be increased in organizations also through non-meditation-based intervention, and that manager compassion increased not only based on managers' own understanding, but also based on the ratings of their followers. Additionally, the illustrative feedback suggests that responding to others'

positive emotions might play an important role in terms of psychological safety in organizations. Future research could look into the link between not only compassion and psychological safety, but also responsiveness to positive emotions and psychological safety.

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## Transactive Strengths Systems: Considering Strengths Use in Organizations as a Multilevel Construct

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**Keywords:** strengths use, teams, transactive memory systems

*Background:* Organizations need to develop strategies to optimally apply the strengths of a diverse workforce. Previous studies have indicated that strengths use is associated with higher levels of employee well-being [1,2,3] and job performance [4,5,6,7,8]. So far, the focus in research on strengths use has largely been on the individual level. However, in many organizations, the team context has an important influence on whether individuals' strengths will be noticed, appreciated by others, and used [10,11].

*Aim:* In this theoretical paper, we investigate how collectives can make use of the strengths of their individual members by incorporating the social embeddedness that both enables and constrains individual strengths use.

*Method:* We synthesized the literature on strengths use, teams, and Transactive Memory Systems (TMS).

*Results:* Based on TMS theory [12], we propose that a Transactive Strengths System (TSS) may leverage team strengths by the collective awareness of which strengths are relevant to the team's tasks, and how those strengths are distributed among team members. A TSS comprises three different features namely strengths specialization, strengths credibility, and strengths coordination [13]. Strengths specialization refers to the differentiated structure of member's strengths, and to the knowledge that team members have about who possesses what strengths. Strengths credibility reflects the extent to which team members are confident relying on the strengths of other team members. Strengths coordination refers to the effective orchestrated use of the strengths of individual team members to complete the group task. TSS can be characterized as an emergent phenomenon because it originates in the characteristics of individuals, is amplified by their interactions, and manifests itself as a higher-level, collective phenomenon [14].

*Conclusions:* Even though TSS has a similar structure as a TMS, there are crucial differences between the individual-level resources that are central in both concepts (strengths versus knowledge, respectively). First, because employing strengths is inherently energizing [15], it may have important motivational effects that may also be relevant at the group-level—and such effects are not present when using knowledge. Second, individual strengths become manifest in episodes of personal excellence, looking within one person, rather than in episodes of comparative excellence, looking across persons [16]. In contrast, in a TMS, expertise is usually identified by comparative processes. Third, whereas knowledge and expertise usually refer to task-relevant attributes, strengths refer to a broad range of individual characteristics that may not be directly related to the content of the job but more to the social

processes that are needed to get the job done (e.g., zest, creativity). Fourth, whereas knowledge can easily be developed, this is less the case for strengths that refer to relatively stable characteristics [17].

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## Understanding Teachers' Caring and Student Engagement: Teachers' and Students' Perspectives

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**Keywords:** caring, teachers, students, education, engagement

*Background:* Research has consistently pointed to teacher-student relationships as a key contributor to students' learning, engagement, achievement (1,2) and well-being (3). In the present research we focus on **teacher caring**, which has been suggested to be at center of high-quality teacher-student relationships, yet has been somewhat neglected in educational empirical research. Caring teachers are hypothesized to have a notable effect on students' educational and learning process (4) because the need to be "cared-for" (5) is considered a basic need, essential for feeling psychological security (6) and engaging in learning and exploration activities (6,7). Thus, teachers' caring is expected to lead to increased student engagement in school and in related learning activities.

*Aim:* The present study aims to empirically explore caring as a potential antecedent of high-quality teacher-student relationships, leading to students' engagement – a core predictor of students motivation and achievement (8), and suggest mechanisms supporting these connections. Specifically, we explored the connection of teachers' self-reported caring for their students with their students' school engagement, and the role of teacher-student relationship in mediating this connection. We further examined the associations of teachers' caring feelings with teachers' own engagement and decreased burnout, and the role of teacher-student relationships in mediating these associations.

*Method:* We surveyed 31 teachers and their 638 students, who completed measures of teachers' caring for students, engagement, and teacher-student relationships. Teachers also completed a measure of work burnout.

*Results:* HLM analysis indicated that teachers' reported caring for their students predicted students' reports of their school engagement ( $b = .17, t = 2.11, p < .05$ ). A mediation analysis (using PROCESS; 9) of students' data showed that this effect was driven by teacher-student relationships: students' data indicated that students' reports of their feeling that their teacher cares for them predicted their engagement ( $r = .36, p < .001$ ), and this association was mediated by students' relationships with teachers ( $LLCI = .10; ULCI = .15$ ).

Mediation analysis of teachers' data indicated that teachers' self-reported caring for their students was associated with increased teacher engagement ( $r = .58, p < .001$ ), and decreased teacher burnout ( $r = -.35, p < .01$ ) and that these association were mediated by the quality of teacher-student relationships ( $LLCI = .02; ULCI = .39$  and  $LLCI = -.38; ULCI = -.01$  for engagement and burnout respectively). (All analyses were conducted while controlling for demographic variables).

*Conclusions:* The findings highlight teachers' caring as a potential antecedent of positive teacher-student relationships, which enhance teachers' and students' engagement. The results indicate the need for more rigorous research on teachers' caring- and its potential antecedents.

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## Boosting a Sense of Belonging within School Organisations

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**Keywords:** belonging, schools, social support, socio-ecological model, meta-analysis

*Background:* Schools represent organisations with multiple levels of influence, where students, teaching and non-teaching staff, leadership, and parents interact and impact upon one another, in ways that can be supportive or detrimental to wellbeing. A sense of belonging is a fundamental need. Belonging predicts academic and occupational success, good psychological and physical health, and positive social relationships. Despite a large literature on belonging, it is unclear which factors are most crucial for supporting a sense of belonging in students.

*Aim:* This systematic review aimed to identify the main factors that influence a sense of school belonging in secondary school settings, and to identify strategies that teachers and school leaders can take to foster a sense of care within the organisation.

*Method:* First, we systematically reviewed the literature to identify factors that correlate with school belonging. Themes could be clustered in demographic variables (e.g., gender, school type, school location, age, and race/ethnicity), individual factors (academic motivation, personal characteristics, emotional instability and mental health), social factors (peer support, teacher support, parent support), and environmental variables (e.g., perceptions of fairness, sense of safety). Second, we meta-analytically synthesised 51 studies, which included 67,378 students, comparing average effects for 10 themes. Finally, we considered empirically-supported strategies for boosting school belonging within each theme.

*Results:* Of the identified factors, teacher support and positive personal characteristics (e.g., conscientiousness, optimism, positive self-esteem) had the strongest impact on belonging. Positive characteristics had a greater impact on boosting belonging than the risk created by emotional distress. Proximal factors (i.e., individual and factors) had a greater impact on belonging than distal factors (i.e., environmental factors). Demographic factors (gender, race/ ethnicity) were only weakly related. A variety of strategies for supporting student belonging were identified.

*Conclusions:* This study identifies which factors are most relevant, as well as strategies that teachers and school leaders can utilise to foster a sense of belonging in students. Support by teachers or other caring adults in the organization is particularly important. Notably, belonging is relational in nature – strategies that cultivate better relationships between students and their teachers not only may boost the students' sense of belonging but also help the teacher feel more connected to the organization and to their work. Findings may help facilitate the use of evidence-based practices to enhance a sense of belonging for all members of the educational organization.

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**Symposium**

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***Post-traumatic Growth as a Positive Legacy of Trauma: The Role of Personality, Family and Religion***

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**SYMPOSIUM OVERVIEW**

Post-traumatic Growth is a construct of positive psychological change or transformation that occurs as a result of individual's emotional and cognitive struggle with a traumatic experience. In recent decades, researchers investigating the concept of posttraumatic growth have been focusing on how traumatic experiences in spite of their aversive nature can have positive psychological consequences. In this symposium we explore post-traumatic growth (PTG) in three domains: (1) Personality; (2) Family, and (3) Religion and meaning making. Four studies explore PTG in the sample of internally displaced persons (IDPs) – people who have been forced to flee home but remain within the home country's borders. We consider internal displacement as a potentially traumatic event which is an experience that might cause physical, emotional, psychological distress, or harm. In study 1 we investigated how emotion related personality dispositions and self perceptions (emotional intelligence) and family functioning help people to deal with traumatic experience and what are the roles of successful communication and problem solving as well as affective and behavioral involvement in family for post-traumatic growth. In study 2 we examined the relationship between basic personality traits, forgiveness and post-traumatic growth - whether forgiveness and appraisal of the life events play a crucial role in growth after trauma and change a life in positive way. In study 3 we explored how the traumatic event affects individuals' assumptive world, how they 'rebuild' it and find a meaning in life and what is the role of the religion? And lastly, in study 4 we explore how PTG is reflected in life story narratives of people who experienced life changing crisis. In sum, based on four empirical studies we argue that PTG is a complex phenomenon related with family functioning, personality factors and spirituality. Symposium contributes in the field of positive psychology by identifying of the predictors and correlates of PTG that lead people to create more meaningful life by improving the relation with others, finding new possibilities, gaining personal strength and appreciation of life.

## PRESENTATION 1

# The Role of Emotional Intelligence and Family Functioning in Post-traumatic Growth

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**Keywords:** posttraumatic growth, family functioning, emotional intelligence

*Background:* Trauma research has a long history - most of leading researchers being interested in studying psychopathology as an effect of traumatic experience within individuals. However, in the course of the last twenty years, researchers have been focusing on positive changes experienced as a result of the struggle with trauma. Growth can be also a result of dealing with traumatic experiences. Nevertheless, few studies are exploring the construct of posttraumatic growth (PTG) among the family members, especially, after experiencing war.

*Aim:* The aim of research is to study predictors of posttraumatic growth in a family system that can be related on the one hand, to the effectiveness of family functioning and on the other hand, emotion related personality dispositions and self-perceptions.

*Method:* Internally displaced families during 2008 armed conflict in Georgia comprise the participants of this research (N of families – 80; altogether - 240 participants). Study participants (parents and children) filled in the trait emotional intelligence and family functioning questionnaires along with the post-traumatic growth questionnaire in order to assess individuals' emotion related personality dispositions and family functioning.

*Results:* Family functioning is a predictor of posttraumatic growth in adults – individuals having healthy family functioning have more possibility to develop posttraumatic growth. Emotion related personal dispositions are of foremost importance for posttraumatic growth in adolescents. Emotion related personal dispositions are predictors of posttraumatic growth. The research indicated that the higher the emotional intelligence of an individual is, the more the chances are that posttraumatic growth will occur. Family functioning doesn't have predictive value for posttraumatic growth in adolescents. Parents' emotional intelligence or the level of their posttraumatic growth doesn't have implication for PTG in adolescents. Two components of emotional intelligence bear much importance with regard to posttraumatic growth, such as: well-being and motivational aspects. Mediation analysis show that the pattern of a family functioning mediates the relationship between emotional intelligence and posttraumatic growth. Individual's emotional peculiarities affect on his or her pattern of family relationships, which in turn contributes to posttraumatic growth.

*Conclusions:* The effectiveness and the pattern of family functioning and emotional personality dispositions play an important role in positive changes aftermath traumatic experience. The study contributes to the verification of existing theoretical standpoints and constructs concerning posttraumatic growth by examining empirical data of internally displaced families. The study made possible to identify factors that may be important in the recovery process war-affected and forcibly displaced populations and therefore provides practitioners with some empirically grounded suggestions to use in their work with individuals recovering from traumatic experience.

## PRESENTATION 2

### How Dispositional Forgiveness is Related with Personality Traits and Post-Traumatic Growth

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**Keywords:** posttraumatic growth, personality traits, forgiveness

*Background:* Several studies show that forgiveness is related to different positive outcomes however relation between posttraumatic growth and forgiveness is not well established. While it is asserted that personality traits are crucial for posttraumatic growth, still much remains to be learned on the nature of these relationships. The results vary in regards to neuroticism, meaning that some studies fail to find a significant relationship with growth, while others show a negative association. However other personality factors - conscientiousness, extraversion, openness, agreeableness are significant determinants for PTG.

*Aim:* The study investigates Internally Displaced Persons (IDP) as potentially traumatized sample, and regards forced displacement as potentially traumatic experience. We suggest that personality traits (HEXACO) and dispositional forgiveness might be related to PTG experience.

*Method:* Two hundred thirty IDPs (due to 2008 war) were administered Georgian versions of posttraumatic growth inventory, HEXACO-PI-R, dispositional forgiveness scale and The Appraisal of Life Events Scale.

*Results:* Data analysis revealed that factors of personality six factor model are statistically reliably connected to forgiveness and PTG. Namely, agreeableness, emotionality and humility are positively associated and extraversion and openness are negatively with forgiveness. Besides, negative correlation was established between PTG and forgiveness.

*Conclusions:* The big six personality factors and tendency to forgiveness as well as appraisal of the events are related to post-traumatic growth. Practical benefit that this research can yield is revealing the mechanisms of positive transformation process aftermath negative experience that will help professionals to successfully plan and implement effective intervention

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**PRESENTATION 3****Meaning – Making, Religiosity and Posttraumatic Growth in Case of Internal Displacement***Ketevan Mosashvili*

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**Keywords:** posttraumatic growth, meaning making, religiosity

*Background:* Most of the empirical research in trauma psychology focuses on posttraumatic reactions, rather than on positive outcomes. Although the concept of posttraumatic growth has gained increased attention recently, there is still little evidence about the factors contributing to these phenomena.

*Aim:* Traumatic encounters, especially war experiences, affect individual's assumptive world, which they need to 'rebuild' somehow. Religious beliefs are considered to provide people with broad frameworks of meaning that might help them explain certain situations in a reasonable way. Does religion have a direct effect, or are there any mediating factors?

*Method:* The study presented in this paper investigates Internally Displaced Persons (IDP) living in small settlements as a result of Russian-Georgian armed conflict in 2008. Based on data from (N = 190) Georgian IDP including scales on The Religious Commitment Inventory-10 (RCI-10), Religious Coping (COPE Inventory), Meaning-Making Coping (COPE Inventory) and Post Traumatic Growth Inventory (PTGI), Structural Equation Modeling (SEM) was used to understand the posttraumatic growth and contributing factors.

*Results:* Results indicate that religious commitment is not directly related to areas of posttraumatic growth but it has a positive impact on posttraumatic growth when it fosters religious and non-religious ways of coping. Each and every component has shown to have unique contribution to the outcome variable.

*Conclusion:* The major finding of our study is that separating secular and religious realms of growth is promising because not everybody uses the same ways of coping. Our empirical findings with SEM support the idea of this "dichotomy" showing that religious commitment and religious coping do positively affect posttraumatic growth besides meaning-making coping and detecting the abovementioned particular pathways.

## PRESENTATION 4

### Posttraumatic Growth and Positive Resolution in Life Story Narratives of Internally Displaced Persons

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**Keywords:** posttraumatic growth, redemption structure, life stories

*Background:* As the transformational model of posttraumatic growth suggests, it is both, outcome and the process unfolding over time in the aftermath of traumatic event. The notion of the process implies construction of life stories or narrative identity, as the way and form for making sense of traumatic event and giving the purpose to one's life. As previous research show, specific way of constructing one's life story contributes to deeper elaboration and enhancing the personal growth resulted from traumatic event. It is to construct positive ending of the story, which affirms and explains how one's self has been positively transformed.

*Aim:* The study explores the links between posttraumatic growth and positive resolution of life events constructed in the process of telling one's life story in case of internally displaced persons (IDP).

*Method:* Georgian version of posttraumatic growth inventory was administered to 100 participants (IDPs and ordinary citizens of Georgia). Life story narratives were recorded and coded for redemption sequence, as the measure of positive resolution of the story, as well as for enhanced agency, communion and ultimate concerns, and content aspect.

*Results:* Only 1/3 of all analyzed stories (178 out of 540) contained at least redemptive imagery. None-IDP citizens told more redemptive stories where themes of growth, learning and improvement dominated; however, if IDPs structured their memories in redemption mode, content wise more than half such stories would be stories of improvement and adaptation. As the results showed, memory type and group reliably predicted positive resolution of told life events. Besides, there were moderate but valid correlations between positive resolution in life stories and two factors of posttraumatic growth (New possibilities and Personal Growth) in both groups and the score on these factors can be reliably predicted by redemption structure of narrated experiences.

*Conclusion:* IDPs construct less stories with positive ending than controls, however, if they do so, the themes of growth and improvement dominate in their stories. Interaction of memory type and group affiliation of the narrator (IDP or not) reliably points out the positive endings of the told life stories, which in turn serves as good predictor for two factors of posttraumatic growth, namely new possibilities and personal growth. Hence, positive resolution of the stories told in frame of narrative identity serves as one of the basis for growth process aftermath traumatic experience.

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**Symposium**

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***Affective and Cognitive Aspects of Well-being***

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Well-being appears to be an important aspect of human experience, with a great impact on different facets of human life. It is a broad concept that consists of a person's cognitive and affective evaluations of one's own life. In this symposium we explore cognitive and affective aspects of well-being. Mind wandering and rumination are considered as cognitive aspects of well-being, whereas flow and perfectionism represent an affective part. In four empirical studies we will talk about how mind-wondering, flow, personality traits, rumination and perfectionism are related to individuals' well-being. Specifically, in study 1 we explore flow and mind wandering as affective and cognitive states and how they contribute to psychological well-being. In study 2 we try to find out whether personality has a direct impact, or it's the love style that interferes with the relationship and leads individuals to the well-being in marital context? In study 3 we consider rumination as a potential factor that hinders persons' subjective well-being and explore how personality traits impact this relationship. In study 4 we investigate the link between flow and well-being in context of perfectionism. The studies contribute to the field of positive psychology by identifying factors that are important to achieve high level of psychological well-being. Therefore, they provide some empirically grounded evidence about the nature and complexity of phenomena.



## PRESENTATION 1

# Wandering Mind in Flow: The Relationship of Daydreaming with Psychological Well-being

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**Keywords:** flow, mind wandering, psychological well-being, positive daydreams

*Background:* Flow is the state of deep immersion in activities we engage, but we focused that the state of immersion may occur without activities, like engagement with fantasies: when the mind is wandering – losing backgrounds, directions and time. The subjective experience of immersion can be very similar to flow experience. But flow is the process of immersion, when we face external environment, activity and proper conditions, while daydreaming is almost autistic, internal process and yields only in unawareness of environment. The outcomes are different as well: flow brings tangible results in relationship to external world and level of satisfaction. For this reason, flow is proved to have predictive validity for psychological well-being. While some kinds of daydreams may be pleasurable, frequent disengagement from external world may have negative influence on person's life. That's why, empirical studies yielded contradictory results on the relationship between mind wandering and psychological well-being.

*Aim:* Following study aims to describe the association between flow and mind wandering and the impact of flow on the relationship between mind wandering and psychological well-being.

*Method:* 341 individuals participated in the study ( $M=24$ ;  $SD=2.666$ ). Dispositional flow scale (Jackson & Marsh, 1996) was used to evaluate individual's inclination to flow experience, Short Imaginary process inventory (SIPI; Huba, Singer, Aneshensel, & Antrobus, 1982) was used to measure daydream frequency and assessment of Subjective Well-being (Ryff, 1995).

*Results:* As the results indicate, flow is not associated to general mind wandering tendency, but both have common aspect of time transformation, which can be the indicator of immersion. Furthermore, as daydreams are differentiated as negative or positive, flow is differently associated to different contents of daydreaming. Flow can predict positive daydreams and plays the role of mediator between positive daydreams and psychological well-being. Positive daydreams are not linked to psychological well-being if we control flow. Flow negatively predicts negative daydreams as well.

*Conclusions:* The study demonstrates new insights about the nature of mind wandering and flow relying on their relationships, it underlies the similar nature of them and suggests, that existence or absence of flow may in some degree determine the formation of daydream tendency into positive or negative content, because flow predicts positive daydreams, as well as negative ones. In case of positive daydreams mind wandering is associated to psychological well-being. The study demonstrates how the flow experience protect the wandering mind and leads it to psychological wellbeing.

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## PRESENTATION 2

### Revising the Relationship between Personality Traits and Well-being: The Effect of Rumination

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**Keywords:** personality traits, rumination, well-being

*Background:* Well-being appears to be a crucial aspect of human experience, with a great impact on different domains of human beings. (Diener, E. 2000) Investigation of well-being related factors from the very beginning was related to personality (DeNeve, & Cooper, 1998), though additional information is necessary to explore other variables that could mediate this more or less well-established relationship. (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008)

*Aim:* The aim of this study was to demonstrate a relationship between personality factors, rumination and well-being and to investigate the underlain structures, that might define the nature of this relationship. Study aims to understand whether the personality traits have a direct effect on individual's well-being or the relationship is mediated by rumination.

*Method:* Data based on from one hundred and forty-five participants (55.9% female) including measurements: (1) The short versions of The HEXACO Personality Inventory, (Ashton, M. C., & Lee, K. 2009), (2) Trait emotional intelligence questionnaire (TEIQue-SF) (Cooper & Petrides, 2010), (3) Ruminative Responses Scale; (Treyner, et al, 2003). and (4) Subjective Well-being Scale was used to identify factors that contribute to the subjective well-being. (Diener, et al. 2009).

*Results:* As predicted, personality basic traits as well as emotional dispositions are related to subjective well-being. Specifically, extraversion and conscientiousness as well as all emotional intelligence aspects are positively related to subjective well-being. Emotional intelligence is negatively related to Rumination. Rumination is negatively related to subjective well-being and mediation analysis show that rumination mediates the relationship between some personality traits and subjective well-being.

*Conclusions:* The study proves the link between well-being and personality traits, also suggest that some underlined factors might modify this relationship. Personal predisposition to ruminate determines whether or not personality traits stimulate subjective well-being.

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## Love, Marriage, and Personality: When the Similarity Matters

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**Keywords:** love styles, HEXACO personality traits, Marital satisfaction

*Background:* Marriage has been documented in every known culture and has been described as the most important and fundamental human relationship, because it provides the primary structure for establishing a family relationship and rearing the next generation (Larson & Holman, 1994) [5]. While marriage seems to be a highly desirable relationship, statistics indicate that marital satisfaction is not easily achieved. Scientific study of marital satisfaction attracted widespread attention in the 1990s from scholars representing diverse orientations and goals. This interest is not accidental, because marital satisfaction is an important factor that affects the family as a whole. Also, it is associated with a lot of different positive correlates in individual domain; Research indicates that marital satisfaction is important for health and well-being (Walker et al, 2013)[8]. Also, studies have confirmed the effect of marital relationship quality on physical and mental health, and on social-mental adjustment in different dimensions of social and personal life (Isanezhad et al, 2013)[3]. Hundreds of research have been conducted upon nature and determinants of marital satisfaction. However, few studies have explored the construct of marital satisfaction in relation with attitude towards love while controlling the effect of basic personality traits, such as, HEXACO.

*Aim:* The purpose of this study was to investigate the relationship between attitudes toward love, personality traits and marital satisfaction between married couples. Does the personality have a direct impact, or it's the love style that interferes with the relationship and leads individuals with certain personality traits to the marital happiness? Are there any gender differences in love style preference or there are some universal patterns? Are we happier when love each other in similar manner? Is the difference in personality related to marital dissatisfaction?

*Method:* 108 married heterosexual couples participated in this study. Participants completed the following questionnaires: The HEXACO Personality Inventory (Lee & Ashton, 2004)[6]; Love Attitudes Scale (Hendrick, C. & Hendrick, S., 1986)[2]; Revised Dyadic Adjustment Scale (RDAS) (Busby, Christensen, Crane & Larson, 1995)[1]; Kansas Marital Satisfaction scale (Schumm et al, 1986)[7].

*Results:* Results showed that spouses attitudes toward love are related with each other and discrepancy in that domain correlates with marital satisfaction for both of the spouses. The HEXACO personality traits of spouses are related with each other and the discrepancy in personality characteristics is related with marital satisfaction, but only for husbands.

*Conclusions:* Personality and love attitudes play an important role in marital satisfaction. this study contributes to the field, because it gives additional information about constructs. The study made possible to identify factors that may be important in marital context and therefore, provides some empirically grounded suggestions for practitioners working with couples that can be used in their work.

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## Subjective Well-being and Personality: Positive Psychology Framework

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**Keywords:** well-being, flow, HEXACO Personality Inventory, perfectionism

*Background:* Subjective well-being (SWB) is defined as ‘a person’s cognitive and affective evaluations of his or her life’ [2]. Well-being appears to be important aspect of human experience, with a great impact upon different facets of human life. Research evidence shows different facets of personality to have a strong impact on SWB [1,3,4]. Whilst, additional research is necessary to explore relations and causalities between SWB and different personality traits.

*Aim:* Current study focuses on potential positive outcomes of various personality facets such as HEXACO six-dimensional framework of personality structure and perfectionism in relation to well-being. Firstly, the study explored relationships between different facets of flow and well-being as well as perfectionism and well-being. Second, the study examined both mediation effect of flow and HEXACO model of personality for the relationship between perfectionism and psychological well-being.

*Method:* Georgian versions of Dispositional Flow Scale-2 (DFS-2) (Jackson et al., 2008), The HEXACO Personality Inventory – Revised Short Version (HEXACO-PI-R ) (Ashton, M. C., & Lee, K. 2009), Perfectionism Inventory (PI) (Hill, 2004) and Ryff’s Psychological Well-Being Scale (PWB) were administered on a sample of one hundred sixty participants from the general population.

*Results:* The results showed that flow is positively related to well-being and different components of flow are significant predictors of the well-being composite. Different aspects of perfectionism are also related to well-being. On a dimensional level, Conscientious Perfectionism scale is positively and Self-Evaluative Perfectionism is negatively associated to well-being. Self-Evaluative Perfectionism was a significant predictor of well-being in total. Flow was found to mediate the relation both between conscientious and self-evaluative scales in relation to well-being. From the HEXACO model of personality traits both well-being and consciousness and openness to experience proved to mediate the relationship between perfectionism composite and well-being. Within subscales, extraversion was the single mediator between self-evaluative perfectionism and well-being.

*Conclusions:* Findings call attention to the disposition of flow as a contributor to psychological well-being. They also offer greater insight into complex nature of the association between perfectionism and subjective well-being.

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**Symposium**

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***Enhancing Resilience in Children and Young People***

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**Chair:** *Toni Noble*

**Brief Summary**

All children and young people experience everyday setbacks and some experience serious challenges. All children need to develop the skills of being resilient. International data on the short term and long term impact of adverse childhood experiences (ACEs) on children's resilience highlight the importance of explicitly teaching the skills of resilience to children and young people. These 3 presentations complement each other in exploring how schools can help all children, young people and teachers develop the skills of resilience.

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**PRESENTATION 1****Teaching Resilience in the Primary Years****Presenter:** *Toni Noble*

What are the skills of resilience? How can teachers effectively teach these skills from the early years of schooling? This presentation draws on research funded by a community charity and the Institute of Positive Psychology and Education, ACU to teach resilience to children in 6 rural primary schools. The empirical evidence from this project shows that even by grade 5 and 6 there is a decline in student wellbeing. This shows ‘why’ positive education should be introduced in the early primary years. Connecting schools in one community in a shared goal, to teach the social and emotional skills for student wellbeing and resilience, illustrates ‘how’ a community-based whole school approach to positive education can contribute to childhood resilience.

**Toni Noble** (PhD M Ed) is the co-author of the multiple award-winning Bounce Back Wellbeing & Resilience program and Adjunct Professor in the Institute for Positive Psychology and Education at the Australian Catholic University. Her other teacher resource books include *The PROSPER School Pathways for Student Wellbeing. Policy and Practices, Eight Ways At Once (Books 1 & 2) and Different Kids, Same Classroom* on curriculum differentiation and *HITS and HOTS: Evidence based teaching + Social and emotional learning*. Her Government projects include the National Safe Schools Framework, the Scoping Study on Student Wellbeing and resourcing the Student Wellbeing Hub. [www.bounceback.com.au](http://www.bounceback.com.au)

## PRESENTATION 2

### **Empowering Young People to Develop their Own Resilience**

**Presenter:** *Sarah Axford*

How do we engage young people in thinking, learning and talking about resilience and its importance for their psychological wellbeing, and equip them with skills and knowledge in ways that respect their autonomy and self-determination? How can we help secondary schools become environments that promote rather than erode resilience? Between Sept 2014 and March 2016, a group of school leaders and educational psychologists from a small city in Scotland worked together to identify and develop good practice in the promotion of positive mental wellbeing in secondary schools in their area. This presentation will consider the findings of this group, and then go on to describe the ongoing development of a new curricular resource for developing resilience in adolescents.

**Sarah Axford** (MA Psych, M Applied Science) has over 20 years' experience working as an Educational Psychologist in Scotland. She has a particular interest in and knowledge of resilience, positive psychology and wellbeing in children. Since 2008 Sarah has delivered Bounceback! Resilience training to hundreds of teachers and support staff in in Perth and Kinross, and more recently in other parts of Scotland and led research in childhood resilience in 16 schools. [www.theresilientree.com](http://www.theresilientree.com)

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**PRESENTATION 3****Enhancing Developing Teachers' Resilience**

**Presenter:** *Bridget Grenville-Cleave*

Teaching is not what it used to be. The complexity and intensity of the pressures, and the pace of reform, are unprecedented. Research suggests that teachers' resilience impacts not just their own well-being, but the well-being and performance of their students. How can school leaders support their staff in developing well-being and resilience skills both to be well and teach well?

**Discussant:** *Dr Paula Robinson (PhD).*

Positive Psychology Institute, Sydney, Australia

**Bridget Grenville-Cleave** (MAPP, MBA, FCCA, Assoc. CIPD) is a leading practitioner of Positive Psychology and works as a trainer, facilitator and consultant with professionals in the business, education and health sectors. She lectures on the International MAPP programme at Anglia Ruskin University in Cambridge, specialising in Positive Psychology for Practitioners and is a consultant with the UK's leading education charity, the Education Support Partnership. She is author and editor of six books including *Positive Psychology: A Toolkit for Happiness, Purpose and Well-Being*, *101 Activities for Happiness Workshops* and *Positive Psychology in Sport and Physical Activity: An Introduction*. [www.workmad.co.uk](http://www.workmad.co.uk)

## **Symposium**

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### ***The Positive Humanities: Conceptualizing and Measuring the Well-being Effects of the Arts and Humanities***

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**Chair:** *James O. Pawelski, University of Pennsylvania, Philadelphia, PA, USA*

Presenters: Yerin Shim, University of Pennsylvania, Philadelphia, PA, USA, Hoda Vaziri, Purdue University, West Lafayette, IN, USA, Arielle Bonneville-Roussy, Roehampton University, London, UK, Stuti Thapa Magar, Purdue University, West Lafayette, IN, USA

**Discussant:** Antonella Delle Fave, University of Milan, Italy

#### **Symposium Overview**

There is much rhetorical debate on the value of the arts and humanities in our world, but there has been little empirical research to draw on to adjudicate these disputes. One key reason for the lack of scientific evidence is the absence of a conceptual model on which to base investigations of the ways the arts and humanities might contribute to human flourishing. This session will include the presentation of an integrative conceptual framework for studying the well-being effects of the arts and humanities. It will also include a comparison of the well-being effects of majoring in the arts and humanities as compared to STEM fields in a representative U.S. college graduate sample, an exploration of the role of harmonious passion in musical pursuits, and an overview of empirical research evaluating the impact of long-term monastic practices on well-being over thirteen weeks. These presentations will include theoretical, empirical, and practical insights for how best to conceptualize, measure, and advance the well-being effects of the arts and humanities. The goal of this symposium is to take an important step forward in establishing the field of the positive humanities.

## Demystifying the Arts and Humanities: Bridging Conceptualization to Operationalization for Well-being Research

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**Keywords:** arts, humanities, conceptual framework, operationalization, well-being

*Background:* One of the biggest challenges in examining the role of the arts and humanities (AH) in well-being is the lack of a common language and conceptual framework that can be used across disciplines [1, 2]. Although it may seem like a daunting task, developing a conceptualization of the AH that accurately captures their domain, content, and form is a necessary foundational step for enhancing conceptual clarity and promoting operationalization for empirical research.

*Aim:* The purpose of this study was to further develop our preliminary conceptualization of AH [2] based on an extensive review of the extant literature on conceptual and operational definitions. In this presentation, we begin with situating the preliminary conceptualization in the literature and identifying main conceptual gaps that need to be addressed. Next, we present our integrative conceptual framework and discuss the limitations, implications, and future directions for research.

*Method:* A guided literature review on the historical, lexical, philosophical, and institutional definitions, and of operationalizations of initial empirical studies on AH was conducted. The integrative conceptual framework was developed through a cyclical process based on an explication of the preliminary conceptual framework and an abbreviated procedure of both deductive and inductive thematic analysis [3] of the definitions extracted from the literature review.

*Results:* The two frames of the preliminary conceptual framework (i.e., *extensional definition*, *functional analysis*) are well-supported in the theoretical and empirical literature. However, they also indicate several conceptual gaps due to the change in meanings of AH terms throughout Western history and the emergence of non-traditional fields (e.g., digital and public humanities). Areas that need further conceptual clarification, refinement, and development were also identified. The integrative conceptual framework consists of expanded extensional and functional frames to cover these conceptual gaps with the addition of a new frame (i.e., *intensional*) that addresses main common characteristics of the “what” and “how” of AH.

*Conclusions:* An advanced understanding of the conceptual space of AH indicates a vast potential area of research on its well-being effects. Researchers are encouraged to use this integrative conceptual framework as a basis for further development of relevant constructs and operationalization for future empirical research in this area.

Frame	Description	Components	Examples
<i>What</i>	Historical and modern categorizations of domains and objects of study and practice	Disciplines/Industries/Majors	English literature, philosophy, gender studies, music, film
		Courses/Programs/Genres/Topics	Intro to African culture, drawing workshop, hip-hop
		Institutions/Community/Digital platform	Classroom, museum, website
		Occupations	Scholars, teachers, artists, performers, students
		Products (works)	Painting, song, book, performance, craft, exhibition, manuscript
<i>Intensional</i>	Common features of content	Human culture, values, experience, environment, time	
<i>How</i>	Ways of doing within extensional domains and human interaction with objects of study and practice	Modes	Creating, performing, appreciating, studying, critiquing
		Activities	Writing, composing, dancing, acting, visiting, attending, thinking, posting
		Idiographic, interpretive, creative, imaginative, expressive, critical, reflective, communicative, synthesizing, empathic, aesthetic	

*Note.* This is an abbreviated version of the integrative conceptual framework.

**Figure 1.** Integrative Conceptual Framework of the Arts and Humanities

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## STEM or Humanities? Toward a Balance of Job Fit

*Hoda Vaziri*<sup>1</sup>, *Louis Tay*<sup>1</sup>, *Scott Parrigon*<sup>1</sup>, *Norman M. Bradburn*<sup>2</sup>, *James O. Pawelski*<sup>3</sup>

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**Keywords:** STEM, humanities, well-being, interest fit

*Background:* In this manuscript, we address the growing discordant rhetoric, emphasizing either STEM or the humanities in education and work. While there has been a growing desire to channel and groom more young individuals to move into STEM careers [1, 2], proponents of the humanities have challenged this idea [3, 4]. We believe, however, that the struggle for dominance between the two different types of educational and occupational tracks misses out on the broader question of whether individuals themselves are fundamentally interested in the material at hand. Furthermore, while proponents of STEM majors rely heavily on the economic advantages of STEM degrees, we argue that such an emphasis on solely economic outcomes may omit or even mislead what is valued by individuals and societies [5]; therefore, a broader metrics of human well-being should be considered.

*Aim:* This study adopts a person-centric approach in occupational choice to argue that the congruence between individuals' interests and their occupation is important and more predictive of key well-being outcomes as compared to STEM or humanities educational track.

*Method:* We used two datasets from Gallup-Purdue Index (GPI) to examine the hypotheses. *Study 1* utilized the data from a national sample of college-educated employed adults since 1985 ( $N = 8,151$ ), whereas *Study 2* sample was restricted to recent graduates of a public university to control for ability measures. In both studies, respondents self-reported their major, job fit, and well-being outcomes (job, life, and financial satisfaction), among other control variables. We analyzed the data using regression and relative weight analysis [6].

*Results: Study 1.* Job fit accounted for more variance (23%-87%) in well-being outcomes (work, life, and financial satisfaction) as compared to STEM or humanities education (0%-1%), and an equivalent amount of variance in personal income (10% and 11%). *Study 2.* Even controlling for ability and personality, job fit accounted for more variance in work and life satisfaction, an equivalent amount of variance in financial satisfaction, and less variance in personal income.

*Conclusions:* While financial metrics of personal income point to an advantage for STEM majors, human well-being metrics are mainly a function of the individual's perception of fit, and lack of fit may result in lower well-being independent of the major field of study. These findings are significant, given, as a society, we are moving toward a climate in which studying in STEM majors are overemphasized, humanities majors are undervalued, and more competent individuals are channeled and pressured into STEM careers. We recommend that adolescents and youths should be encouraged to make career decision not solely from an economic perspective, but from a broader, and long-term, well-being perspective, so that they can thrive and flourish.



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## The Development of a Passion for Music and the Arts

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**Keywords:** music and the arts, development of passion, lifelong wellbeing

*Background:* Active participation in leisure activities is a central part of everyday life, and often seen as promoting psychological growth, well-being, and healthy development at any age [1]. In this presentation, we look at how a passion for music and the arts may develop, and how this development may give an impetus for lifelong successful engagement in the arts. Two types of passion for a loved activity are proposed [2]: Obsessive passion (OP) is involved when people feel an unmanageable urge to engage in the activity, and Harmonious passion (HP) entails a choiceful internalised engagement in the activity.

*Aims:* First, we propose a conceptual model of the development of a passion for an artistic activity, then we present two studies using musical participation as an example.

*Method:* Development was conceptualized in two ways: chronological age and number of years of involvement in music. *Study 1* aimed to look at how age and involvement were related to HP and OP, with 417 individuals who were actively engaged in music making (15-74 years old, between seven months and 60 years of involvement). *Study 2* aimed to examine whether age and involvement moderated the relations between passion and general wellbeing [3, 4], with 232 participants (18-58 years old). Polynomial regression analyses with moderation were conducted.

*Results: Study 1.* We found nonlinear trends of years of involvement on passion. HP and OP were higher during the first five years of involvement, with a steep decrease in OP thereafter, whereas HP slightly decreased after five years but increased again at 30 years to peak after 45 years. *Study 2.* HP and involvement were positively related to general wellbeing, but not OP and age. We found a moderating effect of musical involvement, but not age, on the association between OP and wellbeing. The less experienced in music participants were, the more OP was negatively associated with wellbeing.

*Conclusion:* These findings suggest that a sustained involvement in music plays a role in how passion operates throughout the lifespan. We will underscore the implications of this research, especially on the role of lifelong perseverance in one's loved activity, and outline some factors that may affect the development of a healthy passion for music and the arts.

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## Monasticism and Psychological Well-being: An Intensive Longitudinal Daily Case Study

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**Keywords:** daily diary, well-being, monastic practice, longitudinal

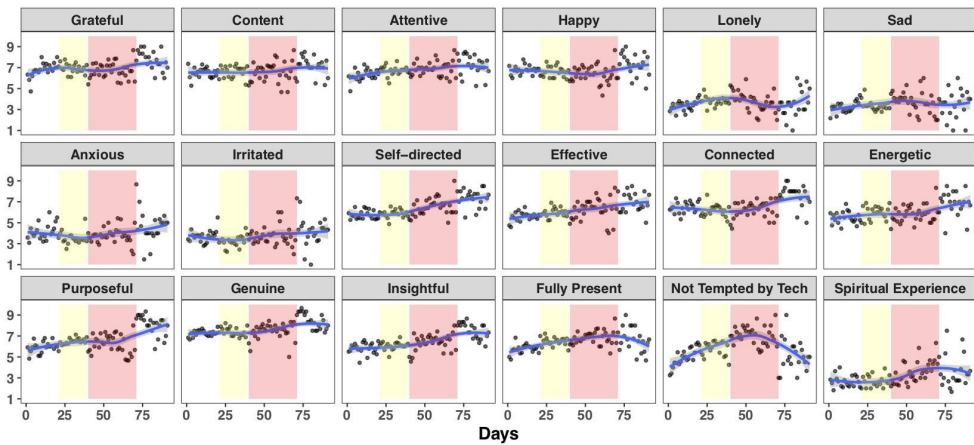
*Background:* Efforts to empirically examine effects of religious and spiritual practices on psychological indicators of well-being often focus on Western religious practices or if building from Eastern traditions, study meditation [1]. Buddhist and Zen monastic practices with underlying goals of contentment and awareness that have strong ties to emotions and motivational outcomes are rarely considered. The daily effects of such practices on psychological factors are also not examined.

*Aim:* Therefore, we present (a) study of influences of monastic practices on psychological outcomes related to well-being (b) using intensive daily methodology for over temporal and long-term effects.

*Method:* Over a full semester (91 days), students ( $N = 12$ ) enrolled in a unique course where they engaged in a partial and then pure monastic experience with restrictions on and awareness of their dietary, auditory, sensory, sexual, mental, and financial actions (observations = 657). They provided daily records on positive and negative affect [2], basic psychology needs/motivations, character traits [3], and spirituality.

*Results:* We conducted multilevel regression models for each outcome. We found significant quadratic trends over time for variables like being fully present and not tempted by technology, with peaks during pure immersion period. Loneliness and sadness increased and happiness decreased during precursor period followed by opposite trend in pure immersion resulting in a significant quadratic trend. Self-direction and effectiveness had linear positive trend through the course.

*Conclusions:* These findings suggest that there is increased awareness, presence, self-direction, and effectiveness during engagement with monastic practice, consistent with the monastic focus on awareness. Moreover, while initial immersion is emotionally difficult, pure ascetic experience balances it out in the end.



**Figure 1.** Average daily ratings on psychological variables during course (partial period in yellow and pure experience in red).

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## Symposium

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### *Is Medicine Ready for Positive Psychology? Innovative Research from the Front Lines of Positive Health*

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**Chair:** *Svala Sigurðardóttir*<sup>1\*</sup>

*Lisa Buksbaum*<sup>2</sup>, *Antonella Delle Fave*<sup>3</sup>, *Merethe Drønnen*<sup>4</sup>, *Marlena Kossakowska*<sup>5</sup>,  
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**Keywords:** positive health, posttraumatic growth, positive medicine, humanistic medicine

#### **Symposium Overview**

*Background:* Although positive psychology has not been fully embraced in the medical context yet, a growing number of positive interventions are included in hospital and clinical programs, addressed to patients, families and healthcare professionals. This panel showcases empirical studies that measure the effectiveness of positive interventions in mitigating the negative impact of chronic and progressive illness across the lifespan, from childhood to old age.

*Aim:* To discuss the practical application of positive interventions in the area of health and medicine in Poland, Norway, and the U.S., including the panelists' research supporting these initiatives. Lisa Buksbaum will present her SOARING into Strength model based on empirical research on the effect of positive psychology interventions to enhance the well-being of paediatric patients by inviting them to do something kind for another child, by working with optimism, altruism, resilience and gratitude amongst others. Merethe Drønnen will present evidence of how positive emotional states can trigger lasting changes in the brain structures and functions, and how these emotions are related to general health, resilience against stress, and disease. Marlena Kossakowska will propose a new theoretical model of personal growth in chronic illness and related empirical findings, described in her latest book. The Model explains the role of illness perceptions, posttraumatic growth initiative and search for meaning in the process of finding the benefits in chronic disease. Elaine O'Brien will share her longitudinal research, Body, Brain Movement Science theory and practices to advance whole fitness, positive individual and community wellbeing and how the power of positive self determination contributes to vibrant aging.

*Method:* In a discussion panel led by Svala Sigurðardóttir, four leading Positive Psychology practitioners will share their experience in applying positive theories and methodologies in medical and health care settings.

*Results:* Antonella Delle Fave will briefly discuss the theoretical and practical implications of the panelists' work, as well as critical aspects and areas that require further advancements at the research and policy levels.

## How Can Positive Emotional States Trigger Lasting Changes in the Brain Structure and Function, and How Are These Emotions Related to General Health, Resilience against Stress and Disease

*Merethe Drønnen*

Positive Change, Norway and Positive Change International, Aaaalesund, Norway, [www.positivechange.no](http://www.positivechange.no) [www.positivechange.us.com](http://www.positivechange.us.com), e-mail: [post@positivechange.no](mailto:post@positivechange.no)

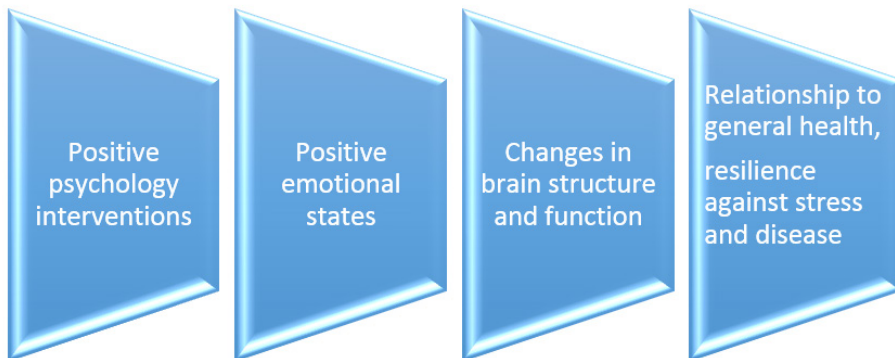
**Keywords:** positive medicine, emotions, neuroscience, health, brain

*Background:* Dr. Merethe Drønnen, Ph.D. is the founder and Managing Director of Positive Change, teaching on-site and online programs worldwide in positive psychology, leadership, neuroscience and motivation. Merethe has previously worked as an associate professor, HR Director and school psychologist. Her teaching subjects are positive psychology, cognition, developmental psychology, motivation, learning and leadership.

*Aim:* Dr. Drønnen will in this panel presentation and discussion on positive medicine present scientifically proven evidence of how positive emotional states can trigger lasting changes in the structure and function of the brain, and how these emotions are connected to general health, resilience against stress and disease. Dr. Drønnen will draw the connection lines, based on the latest research from separate research fields, between positive psychology, cognitive psychology, neuroscience, medicine and health, and sum up how these all are connected. Implications for psychological and physical well-being.

*Method:* Panel presentation and discussion

*Results:* Research results from empirical studies will be presented, cross-discipline connected and discussed in the panel presentation.



**Figure 1.** The relationship between positive psychology interventions, positive emotional states, changes in brain structure and function, and how these are related to general health, resilience against stress and disease (Drønnen, M., 2017).

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## **Lifestyle Medicine: Move2Love, Emotional Vitality, & Whole Health**

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**Keywords:** community dance/exercise, positive self-determination, health behaviour economics, lifestyle medicine, positivity & purpose in aging

An aerobics dance/exercise program, which began in 1991, advanced whole fitness, positive individual & community wellbeing and emotional vitality. The initial aim of this community alliance fitness program was to boost mood, connect people, and lower the risks of substance abuse, cardiovascular disease, and non-communicable diseases. This Lifestyle Medicine research demonstrated how infusing positive psychology, sports medicine and appreciative group dynamics into a group fitness class, resulted in participants' program adherence (up to 20+ years), enjoyment, vibrancy, and positivity (O'Brien, 2015). Community group dance-exercise programming has the potential to help move people, literally, toward a better quality of life, uplifting social connections, learning, meaning, and feelings of mattering. The *Fit-Dance* and *Move2Love* models, described here, offered a vaccination against the epidemic of inactivity (Blair, 2009), and the bane of loneliness and depression. Rhythmic dance/fitness class sessions were choreographed to prime flow (Csikszentmihalyi, 1997), boost PERMA (Seligman's 2011), build awe and *communitas*, as well as encourage face-to-face connections, and fun. Music was a motivator. A most important aspect in the design was to help reduce the risk of depression, loneliness, and isolation (Cacioppo, 2014), while helping people 'feel good,' cared about, connected. Participants, women 55-86 years, demonstrated positive self determination, and vibrancy. Over the past 27 years, the program has served thousands of participants. Now meeting 5 days/weekly the community dance exercise program continues to meet the initial goals of boosting mood, and lowering the risk addiction in an at-risk population. Adding a simple, but elegant dance/fitness program, emphasizing somatic learning, fellowship, and love, made a positive difference. Ultimately, necessary and beneficial programs like these, can be generalized to encourage other groups, even intergenerationally, across domains (schools, universities, at sport, work, play) to achieve similar positive social-emotional and health results.

### **Acknowledgments**

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## Forgiveness: How it Manifests in Our Health, Well-being and Longevity

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**Keywords:** forgiveness, positive psychology, health, well-being, longevity, positive medicine, rumination

Forgiveness is a character strength and process that, when practiced, is associated with improved psychological well-being, physical health outcomes, and longevity. Forgiveness can serve as a protective factor that buffers against poor health and psychological consequences. Common misconceptions about forgiveness can serve as barriers to the desire to cultivate this protective strength, as forgiveness is often conflated with permissiveness, and perceived as permission for a transgressor to engage in hurtful conduct. The benefits of forgiveness, however, are most significant for the individual who has been transgressed, rather than the transgressor. Failing to forgive, or unforgiveness, is the practice of engaging in ruminative thoughts of anger, vengeance, hate, and resentment that have unproductive outcomes for the ruminator, such as increased anxiety, depression, elevated blood pressure, vascular resistance, decreased immune response, and worse outcomes in coronary artery disease. Practicing forgiveness enables the transgressed individual to reduce their engagement in rumination thus reducing their experience of anger, resentment, and hate. Forgiveness, then, is a pathway to psychological well-being and health outcomes.

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## SOARING into Strength Model: The Power of Resilience, Narrative and Gratitude

*Lisa Buksbaum*

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**Keywords:** positive health for children and teens, positive medicine, altruistic interventions, expressive arts interventions

*Background:* Lisa Buksbaum, MAPP, MBA. Lisa is the CEO & Founder, Soaringwords, a not-for-profit organization that inspires ill children and families to take active roles in self-healing. Three experiences with death and illness occurred in her family in a ten-month-period which motivated Lisa to launch Soaringwords, an organization she founded to inspire millions of ill children and their families to “Never give up!” Since 2001, Soaringwords has already embraced more than 500,000 children and families around the world mitigating the negative impact of chronic and progressive illness for children and teens. Lisa will share findings from Soaringwords’ Positive Psychology interventions. 140,000 professionals at leading companies including Johnson & Johnson, Facebook, Google, JPMorgan Chase, Verizon, and We Work have enjoyed Soaringwords’ Employee-Engagement programs. Lisa graduated with honors from The University of Pennsylvania; holds an MBA, Marketing from Columbia University; and received a Master’s Applied Positive Psychology (MAPP) at the University of Pennsylvania. She is getting a certificate from the American Institute of Mental Imagery. She has created positive psychology videos, podcasts and curricula with leading experts including Barb Fredrickson (Love 2.0); Angela Duckworth (Grit); Shane Lopez (Hope); Richard Tedeschi (Post-Traumatic Growth); and Jane Dutton (Compassion). She has led positive psychology workshops at leading companies, schools, hospitals and conferences including IPPA (2015, 2013); ECPP (2016, 2014); IPEN (2016); WholeBeing Institute Embodied Positive Psychology Summit at Kripalu (2017). She is the author of *SOARING into Strength: The New Science Approach to Help You Heal*. She has been featured in *Good Morning America*, *Delta Sky Magazine*, *Fortune Small Business*, *USA Weekend*, and the *Chronicle of Philanthropy*.

*Aim:* To present the SOARING into Strength model based on empirical research on the effect of positive psychology interventions to significantly enhance the well-being of pediatric patients by inviting them to do something kind for another child. The power of Soaringwords’ interventions comes from impacting both physical and psychological systems in a measurable way as ill children experience several positive constructs. SOARING stands for **Shifting/Intrinsic Motivation, Optimism, Altruism, Resiliency/Grit, Imagery, Narrative, and Gratitude**. Soaringwords’ interventions motivate ill children and teens to take active roles in self-healing. Participants will learn how to:

1. **Evaluate** how **positive expressive arts interventions** play an active role in enhancing health and well-being among pediatric patients, family members, and healthcare professionals.
2. **Analyze** data to see how **appreciative movement** is a catalyst for well-being in the midst of hospitalization and health challenges.
3. **Measure** the **impact of altruistic interventions** that benefit another person on elevating well-being for the “giver” as well as the “recipient”.

4. The importance of gathering **qualitative data from essential, proximal “others”** such as patient’s family members and healthcare professionals who have a powerful impact on influencing pediatric well-being.

*Method:* Panel.

*Results:* Empirical studies.

# WORKSHOPS

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## Helping Yourself and Others Feel in Flow and Be Brilliant Using Heart and Mind Connection

**Facilitator:** *Magdalena Bak-Maier*

Neuroscientist and coach at Make Time Count Ltd, United Kingdom,  
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### About Magdalena

Dr. Magdalena Bak-Maier is a recognized thought leader in the field of human empowerment and leadership development. A neuroscientist (Caltech, USA), integration pioneer, productivity author, leading coach and educator she supports people to become integrated leaders. Her key message is that the nervous system is our greatest helper and integration a vital process for creating alignment needed for flow and brilliance. The only coach to merit two Dossiers in Psychologies Magazine based on her tools and approach, and two invited masterclasses at the British Psychological Society her tools and work stand to make impact in a number of key societal challenges. Already, Magdalena's coaching work impacts a uniquely broad spectrum of people from leading thinkers, top scientists, to leaders in church and business as well as fellow practitioners. She has been an invited speaker for BBC Radio, The Guardian, OECD, United Nations Career Roundtable and the New York Times Women's Network, as well as two TED talks on the power of heart and mind integration and kindness and has been an invited expert on the impact of AI in the workplace by the Guardian. For the last eight years she is conducting work to illustrate the triple benefit of human centered development for the individual, the institution and brand perception at learning institutions across the EU and in 2017 she has launched a pioneering online inner leadership development programme called Da Vinci. Most recently she has been invited to assist with leadership development at the Zuckerman Institute at Columbia University. In UK where she is based, she serves as the current Vice-Chair of the Association for Integrative Coaching and Therapy Professionals (AICTP) and a long-standing member of the Association for Coaching (AC). For more see [www.maketimecount.com](http://www.maketimecount.com)

*Learning outcomes:* Specify key learning outcomes and which practical tools the participants will be able to use after attending this workshop.

At the end of the session you will have:

- Greater understanding of how the nervous system supports brilliance and the broad mechanisms by which internal integration supports learning and growth
- Appreciation, insights and felt sense into your level of integration and how this impacts your current and desired life.
- A bag of practical tools to use with others that will help you connect the conscious and subconscious minds.

- Opportunity to briefly explore how your presence and attunement can facilitate powerful shifts in others
- Introduction to the Grid – work-life balance framework – so you can build results, professional success, connection, and wellbeing.
- Take away handout as a useful reminder.

Books by Dr. Bak-Maier will be available for purchase at a publisher discount rates.

*Background:* Provide the context of the workshop in addition to the theoretical and empirical foundation on which it is based.

People seek coaching to achieve positive results and enhance their lives. My fascination with the brain's capacity for continuous remodelling and growth is longstanding. I have applied my learning and PhD in neuroplasticity gained at Caltech USA to talent and leadership development in order to understand what catalyses outstanding, sustainable, and satisfying performance. My consultancy and coaching practice focus on probing and developing tools and approaches that support transformative human empowerment. These are grounded in positive psychology principles. I am pioneering a model of integration based on mind (consciously rational), heart (unconsciously rational and emotional), physical body and spiritual (purpose and essence) alignment. Any activity that supports these four areas being located, put into relation, rebalanced and integrated produces greater levels of internal unity needed for flow and brilliance. My hypothesis is simple: enhancing the synergies between these four dimensions creates the best conditions for wellbeing and all measures of satisfying actualisation. In other words, a person who is "in flow" is an individual where internal synergies are maximised and actively maintained. The best example of this is a healthy child. Such alignment is a naturally occurring, continuous energetic process that we can tap into to help our clients. By merging mindful attention with higher executive functions we can tap different levels of intelligences within the individual and across the larger collective. Discovering the power of flow and how we can bring it about more often is, in my view, a grand challenge that can positively impact education, health, the workplace and our global society.

My work bears out in practice what the leading edge of neuroscience research reveals about how the nervous system develops, senses, learns and remodels itself. The tools and frameworks I have developed support people in (1) delivering better performance – The Get Productive Wheel, (2) creating fulfilling "good lives" - The Grid and (3) catalysing health and brilliance through progressive internal alignment – Da Vinci Inner Leadership. What unites them is a purposeful effort to connect heart and mind, ground it in the physical body and reconnect the person with their true purpose and spirit. Fellow practitioners, individual learners and clients from some of the most renowned institutions (Imperial College London, NASA, Columbia University, Pasteur Institute and many others) are embracing my approach. The results merited two invited British Psychological Society masterclasses (2015 and 2017), as well as two dossiers in Psychologies Magazine.

*Content:* The practical workshops of the conference aim to share and educate participants on how positive psychology can be applied, and further teach participants specific tools and methods on how to apply positive psychology in practice. The description of the content should therefore specify what kind of practical tools the workshop will teach the participants, and a short description of how the training of these tools will be carried out.

We will begin with an experiential somatic exercise to illustrate how the body, emotional centers and higher executive mind connect together. Implications about how this architecture impacts the way people learn and change will be briefly discussed. I will introduce the mind, heart, body and spirit framework and proceed to help attendees examine the impact of specific synergies on their performance, satisfaction and wellbeing. We will use appreciative inquiry into flow states or internal unity moments. We will also examine areas of conflict and how this insight helps us come to terms with the human condition and build strengths. This is more in line with second wave of positive psychology thinking. I will then introduce proven and highly effective exercises I use with clients to deepen the exploration of each part. Their relevance in terms of the neuroscience at play and coaching will be discussed. There will be opportunities for individual and pair work as well as discussion. Moving from internal integration that contributes to psychological wellbeing, in the last part of the workshop, we will explore subjective wellbeing by diving into my Grid work-life balance tool. This simple and highly effective framework supports clients in building resilience by integrating work, life, self-care and their professional career in a way that mirrors how the brain naturally works. These important parameters are becoming paramount in the light of societal and economic agendas such as mental health, employee engagement, individual and group productivity and longevity. Participants will walk away inspired and equipped with practical tools and activities they can use in their own practice. They will also experience how learning and growth can take place through different modalities - pure cognition, emotional-limbic resonance, embodied practice and spiritual energetic connection; and why this way of working with the nervous system produces lasting change.



## Positive Psychiatry

**Facilitator:** *Fredrike P. Bannink*

Clinical psychologist; CBT, SFBT and PP trainer and supervisor, The Netherlands,  
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More and more professionals are discovering the potential of positive psychiatry. Applying positive psychiatry – in times where we see standardized treatments and confection instead of customization – requires two paradigm shifts as well as a culture change, but will undoubtedly enhance the quality and effectiveness of our treatments.

Until recently (mental) healthcare was predominantly aimed at reducing (psycho)pathology. Professionals were often more skilled in treating disease than in enhancing well-being and helping patients to design a new and better life. With our vision of positive psychiatry, we introduce two major paradigm shifts.

The *first paradigm shift* concerns focusing on the person instead of the disease. The focus used to be on what disease the person had, rather than on what person the disease had. Positive psychiatry stands for a personalized treatment tailored to the patient, whereby a focus on problems and deficits is complemented with a focus on competencies and possibilities. It is an integral approach to the promotion of mental health, in which the person takes center stage, not the disease. The medical (psychiatric) practice should no longer be the place where only problems and symptoms are discussed and treated, but also the place where their competences and resilience are discovered and deployed, positive emotions are strengthened, and hope, gratitude and optimism are nourished.

In the philosophy of science, we can discern the *analysis paradigm* and the *synthesis paradigm*. The *second paradigm shift* concerns applying the synthesis paradigm in addition to the regular analysis paradigm. We complement the medical reductionist model – the analysis paradigm of symptom reduction - with the functional solution-focused model – the synthesis paradigm. In the synthesis paradigm, the focus is on designing an outcome that was not there before. In solution-focused terms the focus is on the preferred future of the patient. You may compare analysis to the work of an archeologist and synthesis to the work of an architect.

We consider combining the medical model (analysis) with the solution-focused model (synthesis) in psychiatry as ‘the best of both worlds’. In sum: the focus of positive psychiatry is no longer only on pathology, on what is wrong with patients and on repairing what is worst, but also on their strengths, what is right with them and on creating what is best. I think the field is ready to embrace our vision of positive psychiatry. Are you ready?

Psychiatrist: 'After almost 20 years of focusing on everything that's wrong in the lives of my patients and the workplace, this approach is a real treat.'

Fredrike Bannink, a master at presenting big ideas in manageable parts, offers participants many ideas and easy-to-implement applications to combine the analysis paradigm (the medical model) in psychiatry with the synthesis paradigm (the functional model) and takes the “what” of positive psychiatry to the “how.” By creating a broad range of therapeutic options

when working with patients and their families, the functional model allows the practice of psychiatry to become shorter in time. It generates more autonomy for patients, as well as more light-hearted conversations, which in turn results in less burnout among professionals.

**Dr. Fredrike P. Bannink MDR**

Clinical psychologist; CBT, SFBT and PP trainer and supervisor.

Master of Dispute Resolution; International Full Certified ADR Mediator and Conflict Coach.

Mental Health Trainer for Doctors without Borders.

Owner therapy, training, coaching and mediation practice in Amsterdam, the Netherlands.

International keynote speaker, trainer and author of 40 books on positive psychology and the solution-focused model.

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## Personal Creativity Interventions for Coaching Settings

**Facilitator:** *Dana A. Moldoveanu Brandes*

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This workshop is willing to present in an interactive manner the research results of the study “Increasing the practice of personal creativity as a tool for coaching: An exploratory study.”

Increasing personal creativity builds transformational capacity, helps finding meaning, increases satisfaction in life and creates overall the basis of **creative living**.

The content will focus on **mind set elements of creative living** resulted from previous research like self beliefs, openness to experience, passion, imagination as well as **neuro-cognitive mechanisms** like the interaction between default and executive neuronal network and **activities enhancing personal creativity** like daydreaming, flow, self reflection etc

Several coaching interventions/tools resulted from the research will be presented and the participants will have the occasion to try some. The main goal is to see how these specific exercises could be incorporated in the coaching practice and make it more effective. By developing personal creativity, the coachees will perform better in life in general and in the coaching process in particular.

### Booklet of the interventions

These interventions/exercises are meant to be used by coaches for their clients and are the result of a qualitative and quantitative research with Anglia Ruskin University (Cambridge, U.K).

We propose the following tools to be used in coaching to increase personal creativity of clients. By **personal creativity** it is understood the **ability to construct original interpretations of experience and therefore build transformational capacity**. This capacity depends on the motivation and decision of the person to allow such transformation.

It is assumed that everybody has a potential for creativity and it can be trained or released/unblocked. The “training” takes a certain period of time, depending on the person and the situation and needs to be done in steps allowing and sustaining a smooth shift or change towards a more creative mindset.

We believe that “training the creative muscle” will support the client to perform better during the coaching program as well as in his/her life, when the mechanism is learned and integrated during the coaching program.

It is also possible that increasing personal creativity will allow the client to become more independent and flexible in finding his/her solutions, identifying options and opportunities, find meaning and increase life satisfaction.

The following exercises imply conscientious training of the “creative muscle” including development of a certain set of characteristics, motivations, habits, personality traits, a certain type of attention and its availability etc. The purpose is not to fit the exercises to

train something already existing and maybe often used but to encourage the person to stretch towards something new. Of course, the stretching has to be adapted with smaller or bigger steps accordingly to the capacities and the situation of the client.

Proposed exercises	What it trains in terms of personal creativity
<p><b>Exercise 1</b>  <b>Find a way to be amazed/surprised by something every day</b>            Wonderful things, that we generally take for granted, surround us. Invite your client to enjoy moments in his/her life and exercise curiosity and attention by looking at things/situations in a different way. It is important to invite him/herself to be surprised and/or amazed by them.            A 5 minutes journal to keep a record of the experience will make the exercise more powerful. (S)he can choose its form: written, recorded, a picture, a drawing etc., but we believe the best performance will be reached by reflecting and writing about that moment, having a short description of the situation, the feelings, the thoughts, what was surprising or amazing and why etc.</p>	<p>Curiosity, attention, openness to experience, attention to inner world, shift from outside stimuli to inside reactions</p>
<p><b>Exercise 2</b>  <b>Experience something new everyday.</b>            Invite your client to identify what (s)he is doing every day in the same way for a very long time. Identify what opportunities are there to change and experience something new. For example: experience and experiment new food, different music, dress in a different way, spend time with people (s)he does not usually do, take each day a different way to home, use a different type of transportation etc            A 5 minutes journal to keep a record of the experience will make the exercise more powerful. (S)he can choose its form: written, recorded, a picture, a drawing etc., but we believe the best performance will be reached by reflecting and writing about that moment, having a short description of the situation, the feelings, the thoughts, what was the new experience and why or how did you chose it etc</p>	<p>Curiosity, openness to experience, shift form outside stimuli to inside reactions</p>
<p><b>Exercise 3</b>  <b>Explore shifting behaviours</b>            All people develop a certain pattern of behaviour and we exhibit some more then other. But we have the capacity to use a much larger scale then we usually do. Identify with your client its usual profile of behaviours related to her/his situation and goals in coaching. Identify potential to grow and set an action plan of shifting from the usual dimension of behaviour to the opposite. For example: from serious to playful or humorous; from sensitive to strong, from directive to inquiring etc. Discuss the degrees of shifting and possible occasions, start with baby steps (micro-shifts) and extend bit by bit. Rehearse if possible during the coaching session.            A 5 minutes journal to keep a record of the experience will make the exercise more powerful. (S)he can choose its form: written, recorded, a picture, a drawing etc., but we believe the best performance will be reached by reflecting and writing about that moment, having a short description of the situation, the feelings, the thoughts, what was the new behaviour and why or how did it chose it etc</p>	<p>Complexity, tolerance for antagonistic dimensions, capacity to shift between behaviours when needed, shift from outside stimuli to inside reactions</p>

<p><b>Exercise 4</b>  <b>Get inspired.</b>  Invite your client to reflect and share verbally or in written form (lists, drawings, vision boards) of what inspires her/him in life:  stories of certain moments in life when they felt inspired or at their best people (those met in real life or mentors him/her just read about or have seen documentaries or follow them in the news or TV),  books  quotes  movies  Tedtalks etc  You can start during a coaching session and then let the client do it between the sessions. It is important to have this over a certain period of time, like a month, and get in contact or reconnect with this inspirational persons or moments.  A 5 minutes journal to keep a record of the experience will make the exercise more powerful. (S)he can choose its form: written, recorded, a picture, a drawing etc., but we believe the best performance will be reached by reflecting and writing about that moment, having a short description of the situation, the feelings, the thoughts, what was the story and why or how did (s)he chose it etc</p>	<p>Connect with core values, passions and emotions, inspiration, shift from outside stimuli to inside reactions</p>
<p><b>Exercise 5</b>  <b>Take “the other” to lunch/coffee.</b>  Invite your client to talk to people they do know but do not usually spend time with: colleagues /neighbours other people (s)he knows but who have different backgrounds, different nationality/jobs/political views etc.  Prepare the client for this adventure by explaining why we tend to surround ourselves with people similar to us, what we are missing, what we can gain by reaching out to different people. Enhance his/hers conversational intelligence as it is important to have meaningful conversations during these encounters by listening uncritically and being genuinely curious about how their life is or was and how they evolved or formed those views etc.  A version of this exercise can be to invite the client to read or watch movies about other cultures, other life experiences and situations.  A 5 minutes journal to keep a record of the experience will make the exercise more powerful. (S)he can choose its form: written, recorded, a picture, a drawing etc., but we believe the best performance will be reached by reflecting and writing about that moment, having a short description of the situation, the feelings, the thoughts, what was the new experience etc</p>	<p>Openness to experience, tolerance to different perspectives, observation, accommodation for ambiguity, shift from outside stimuli to inside reactions</p>
<p><b>Exercise 6</b>  <b>Make a date with yourself</b>  Invite your client to choose a space where (s)he feels good, cozy, empowered, a place where one can relax, charge batteries and be alone undisturbed. It is important also to disconnect form emails/phones/internet and allow oneself to be alone and reflect, let the mind wander and relax. It can be one hour twice a week or start with 15 minutes and then extend or adapt accordingly to the schedule. But it is important to have this time set in the agenda. Once this ritual is establish, most probably after a month, it will be possible to transform this physical place into a mental place to which one can connect from everywhere. In exceptional cases (when clients are extremely busy) this date with oneself can start taking place while commuting by car or doing sports.  For making this transformation a 5 minutes journal to keep a record of the experience will make the exercise more powerful. (S)he can choose its form: written, recorded, a picture, a drawing etc., but we believe the best performance will be reached by reflecting and writing about that moment, having a short description of the situation, the feelings, the thoughts, what was new etc</p>	<p>Default network and shift from default to executive network, calming and having slack/ idle time</p>

<p><b>Exercise 7</b> <b>Explore different behaviours</b></p> <p>Invite your client to expand his range of behaviour and experience a new dimension or characteristic or direction.</p> <p>You can use a personality profile of your choice and then plan how to expand by relating it to the clients situation. For example, if the client is rather introvert help him/her plan and do some activities rather an extrovert will do and the other way around. If generally (s)he is shy or not communicating very much, to try once a day to do that in front of family/friends or colleagues. If (s) he didn't dance since kindergarten invite him/her to find a moment or a place to dance even if is just alone at home. If (s)he is generally serious or practical, try something playful or childish etc. It has to fit in the life or profession of the client. Important is to experience the new behaviour in a safe environment first, and then elsewhere as well, when feeling safe.</p> <p>For making this transformation a 5 minutes journal to keep a record of the experience will make the exercise more powerful. (S)he can choose its form: written, recorded, a picture, a drawing etc., but we believe the best performance will be reached by reflecting and writing about that moment, having a short description of the situation, the feelings, the thoughts, what was new etc</p>	<p>Openness to experience, developing complexity by expanding the scale of behaviours, accommodation for ambiguity, shift from outside stimuli to inside reactions</p>
<p><b>Exercise 8</b> <b>Focus and mindful</b></p> <p>Invite your client to give an undivided attention to one single thing/person/activity at a time. Register all sensations, thoughts, feelings etc</p> <p>A 5 minutes journal to keep a record of the experience will make the exercise more powerful. (S)he can choose its form: written, recorded, a picture, a drawing etc., but we believe the best performance will be reached by reflecting and writing about that moment, having a short description of the situation, the feelings, the thoughts, what was new etc</p>	<p>Attention, focus, cognitive flexibility, shift from outside stimuli to inside reactions.</p> <p>Could be very good for people with a lot of ideas helping them to focus and chose. Could help with entering flow state.</p> <p>Generally is used by coaches working on improvement of effectiveness or performance or for calming for clients with anxiety. It can be used sometimes in combination with exercise 6 Make a date with yourself.</p>
<p><b>Exercise 9</b> <b>Expression</b></p> <p>Invite your client to find a way to express what moves him/her. It can be though talking, writing, painting, singing, dancing, gardening, taking photos etc</p> <p>As people are moved by different things, in different ways and in different situation, first invite the client during the coaching session to express different facets of themselves with a story about an imaginary or real situation. Explore the emotions, the value(s) of the story, the meaning and then ask how he/she can give it back to the world.</p> <p>From here, the client can start to identify what moves him/her and how can express this. Another way to explore can be by inviting the client to talk about things (s)he does well and (s)he is proud of without self criticism. Explore why, how, in which moments, what are the underlining emotions etc.</p> <p>Invite her/him to continue this at home and find a recurrent way to express him/herself.</p> <p>A 5 minutes journal to keep a record of the experience will make the exercise more powerful. (S)he can choose its form: written, recorded, a picture, a drawing etc., but we believe the best performance will be reached by reflecting and writing about that moment, having a short description of the situation, the feelings, the thoughts, what was new etc</p>	<p>Connecting with emotions, finding passions/hobbies, capacity to express/bring out the inner world, shift from inside stimuli to outside</p> <p>Could be very good for stress release.</p>

<p><b>Exercise 10</b> <b>Imagine</b> Invite your client to take time and create imaginary worlds by allowing her/himself daydreaming. You can start a preparation during the coaching session with a visualisation exercise that will connect the client to the inner child. This can help him/her to proceed with this activity between the sessions. It can be useful when starting new projects or a new phase in life, when we need to reinvent the future. Important is to help the client find a way to reconnect to the imagination, to the possible and allowing that to happen every day. A 5 minutes journal to keep a record of the experience will make the exercise more powerful. (S)he can choose its form: written, recorded, a picture, a drawing etc., but we believe the best performance will be reached by reflecting and writing about that moment, having a short description of the situation, the feelings, the thoughts, what was new etc</p>	<p>Imagination, daydreaming, default network and shift from default to executive network. It can be used in combination with exercise &amp; Make a date with yourself.</p>
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We believe that no matter what the subject of the coaching is about, practicing an exercise from the above list will make the coaching process more effective by supporting the client to enhance or release his/her personal creative energy and increase the transformational capacity.

## Soaringwords Empirical Research Study: Helping Hospitalized Children Thrive

**Facilitators:** *Lisa Honig Buksbaum*<sup>1</sup>, *Margaret L. Kern*<sup>2</sup>, *Pamela Núñez del Prado Chaves*<sup>3</sup>

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<sup>3</sup>Director, Positive Psychology Research Group, Child Health National Institute, Lima, Peru and the Research Methods and Human Development Professor, Pontificia Universidad Católica del Perú, Peru

### Biographies detailing education and speaking engagements

Lisa graduated with honors from The University of Pennsylvania; holds an MBA in Marketing from Columbia University; and a Master's degree in Applied Positive Psychology (MAPP) from The University of Pennsylvania. She is a student at the American Institute for Mental Imagery under the direction of Dr. Gerald Epstein. Lisa is the CEO & Founder, Soaringwords, a not-for-profit organization whose mission is to inspire ill children and their families to take active roles in self-healing using positive interventions. Soaringwords is unique as the only organization to motivate ill children and families to pay-it-forward to help others. When a child does something kind for another child, it accelerates transformative healing. Lisa has led interventions among 250,000 ill children, teens and families and 140,000 volunteers. She has created positive psychology videos for hospitalized children and families with leading practitioners including Barb Fredrickson (Love 2.0); Angela Duckworth (Grit); Shane Lopez (Making Hope Happen); Richard Tedeschi (Post-Traumatic Growth); and Jane Dutton (Compassion). She has led positive psychology workshops for more than 50,000 people at leading conferences and companies (Johnson & Johnson, CVS, and Accenture). Lisa has been a keynote speaker and panelist at IPPA (2015, 2013); ECPP (2016, 2014); IPEN (2016).

Dr. Margaret L. Kern is a senior lecturer at the Centre for Positive Psychology at the University of Melbourne's Graduate School of Education. Originally trained in social, personality, and developmental psychology, Dr. Kern received her undergraduate degree in psychology from Arizona State University, a Masters and PhD in social/personality psychology from the University of California, Riverside, and postdoctoral training at the University of Pennsylvania. She has published over 45 peer-reviewed articles and chapters. Her research is collaborative in nature, and draws on a variety of methodologies and interdisciplinary perspectives to examine questions around who flourishes in life, why, and what enhances or hinders healthy life trajectories. She leads a professional certificate program on positive education, and has given over 60 talks, presentations, and workshops on positive psychology and related issues around the world.

Pamela Núñez del Prado Chaves, Coordinator and Founder of the "Peruvian Positive Psychology Research Association", coordinator of "La Compañía" at the Peruvian Institute of Children's Mental Health, a not-for-profit Peruvian organization devoted to providing an educational and recreational program to hospitalized children. Pamela works as a researcher and professor at Pontificia Universidad Católica teaching courses as Positive Psychology, Ap-



plied Statistics and Human development at the Psychology and Education Faculty. She won the largest Government Graduate Contest Scholarship for Graduate studies and the Pontificia Universidad Católica biggest Grant for applied research studies. Pamela graduated first in her class at Pontificia Universidad Católica del Perú earning the degree of Clinical Psychologist. She holds a diploma in Psychoanalytic Psychotherapy at the Psychoanalysis Center of Lima; and a Master's Applied Positive Psychology from the University of Melbourne. She has been a panelist at ECPP-2016 and keynote speaker at Universidad del Pacifico International Business conference and PUCP Positive Psychology Conference.

*Learning Objectives:*

1. **Evaluate** how **positive expressive arts interventions** play an active role in enhancing health and well-being among pediatric patients.
2. **Analyze** data to see how **appreciative movement** is a catalyst for well-being in the midst of hospitalization and health challenges.
3. **Measure** the **impact of altruistic interventions** that benefit another person on elevating well-being for the “giver” as well as the “recipient”.
4. **Learn** how to design strategies for incorporating positive interventions into health-care systems.

Practical tools participants will be able to use after attending this workshop:

This workshop will give participants the confidence and skills to design and implement **expressive arts interventions** incorporating drawing, writing and dance. During the workshop, every participant will be invited to create a unique SoaringSuperhero® message and artwork to donate to a hospitalized child. Workshop facilitators will **model this immersive experience** so that participants learn how to implement positive interventions. Having the participants make the project will also **give them a better sense of how hospitalized children feel when they create the pay-it-forward gift to donate to another ill child.**

Participants will come away from the workshop with practical tools for the **creation of relevant survey instruments for children and teens.** Workshop facilitators will **share all of the survey instruments and scripts.** In addition, participants will learn how to gather qualitative data from essential, proximal “others” such as patient’s family members and healthcare professionals who have a powerful impact on influencing pediatric patient well-being. These significant constituencies add context and insights to the research data.

Workshop facilitators will share tools and strategies to ensure that positive interventions work in diverse cultural settings.

Workshop facilitators will discuss **proven strategies** so participants can learn how to **work with the most receptive departments within large hospitals and healthcare systems** in order to have a positive impact on the greatest number of patients, family members and healthcare professionals.

Importantly, healthcare professionals attending this workshop will learn how to implement positive interventions for themselves and their peers, to mitigate compassion fatigue and caregiver burn-out.

*Background:* Each year millions of children live with medical challenges and face the indignities of hospital life. They struggle to maintain a sense of identity, within an environment that is chaotic, uncontrolled, and challenging on many levels. Ill children and teens make dozens of choices throughout the day that can create positive emotions, self-expression, and connection, or lead to a sense of hopelessness and isolation. Family, friends, and healthcare workers want the best for the child. The broken healthcare paradigm makes pursuit of wellbeing challenging at best and, at times, impossible. What can healthcare professionals, families, friends, and even strangers do to facilitate flourishing?

The workshop is based on the Soaringwords' Empirical Research Study, which involved testing a SoaringSuperhero® expressive arts intervention and a customized Zumba® Fitness dance class on elevating the well-being of 2,000 pediatric patients, their families and the hospital professionals who care for these children in the U.S. and Peru. This study is an extension of Lisa Buksbaum's Master's Thesis, Soaringwords Empirical Research to Measure the Well-being of Hospitalized Children under the Internal Review Board (IRB) at the University of Pennsylvania.

Participants in this one-time intervention are assigned to one of four groups: 1) patients experiencing a SoaringSuperhero® expressive arts project and a Zumba® Fitness class; 2) patients experiencing a SoaringSuperhero® expressive arts project only; 3) patients experiencing the Zumba Fitness class only; 4) an active control group asked to make a drawing of a person for the same amount of time as the above mentioned interventions. Quantitative and qualitative measures compared the experiences of the patients. While all of the conditions were beneficial, suggesting that doing activities and getting attention matters, the findings support the Soaringwords interventions.

### **Soaringwords' Mission**

Soaringwords is a not-for-profit organization whose mission is to inspire ill children and their families to take active roles in self-healing. Soaringwords is unique as it is the *only* organization to motivate ill children and families to “pay it forward” because when a child or young adult does something kind for another child it accelerates transformational healing.

*Content:* This workshop clearly demonstrates how positive interventions can be applied to ill children, teens and family members. Soaringwords pioneered a new positive psychology model to enhance well-being of patients, their families, and caregivers. This evidence-based model is called SOARING. SOARING has been tested among hundreds of patients in the U.S. This new study expands the sample beyond the U.S. to assess the impact among thousands of pediatric patients and their families, and hospital staff. The model consists of seven components:

**Shifting:** you can do something to create a positive shift in your attitude, your body, and overall well-being.

**Optimism:** you can choose to find good things to notice and celebrate even when times are difficult or painful.

**Altruism:** you can gain a sense of control, calm, and purpose by sharing your creativity, kindness, character strengths, and hope with others.

**Resiliency:** you have the capacity to flourish in the face of difficulty.

**Imagery:** you can tap into your inner knowledge to heal.

**Narrative:** you can heal through the power of storytelling, writing, and reading.

**Gratitude:** you can choose to experience moments of appreciation, even in the midst of challenges.

*Intended audience for this workshop:*

Healthcare professionals, Educators, Students, Researchers. This workshop will be extremely relevant and useful for anyone grappling with illness in their lives or their family.

The workshop will educate participants with an in-depth review of study design, interventions/outcomes on adolescent well-being and how proprietary pay-it-forward positive psychology interventions encourage ill children and teens to take active roles in their own healing and the healing of others. We will share data from family members and healthcare professionals to show the impact of the intervention on the well-being of these important constituencies. To provide an experiential dimension to the talk, participants will be invited to take a few minutes to create a SoaringSuperhero® message and artwork to donate to a hospitalized child in Budapest. This simple, quick action will make the empirical research findings more relevant for audience members. The workshop will conclude with a hands-on experiential peak ending, inviting participants to join a two-minute customized Zumba dance routine that has been shared with thousands of hospitalized children and teens around the world.

The workshop is **fast-paced and highly engaging**. We will show **compelling videos** of hospitalized children and teens engaged in the positive interventions and **share examples of the artifacts** – the messages and artwork – that the children made during the empirical study. We will **lead interactive role-playing** where each participant will participate in two of the study conditions: the **creation of the positive intervention/art project** and **participating in the positive intervention/dance experience**.

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## **Trust in Action: The First Clinical Workshop Internationally on the Role of Trust in Fragile Process, Recovery and Wellness**

**Facilitator:** *Zoë Chouliara*

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**Keywords:** trust, fragile process, emotional injuries, therapeutic relationship, relational approaches

*Learning outcomes:*

1. To increase awareness about latest definitions, function, components, factors of trust in clinical practice
2. To provide experiential knowledge of trust and ruptures of trust in life and in the therapeutic relationship

*Background:* The focus on therapeutic interpersonal trust has resulted from research enquiries that span over 15 years. The applicant's previous research on the experience of chronic illness [1,2,3], disability and person-centred practice [4,5,6] and on recovering from childhood/relational trauma indicated the importance of trust. Subsequently, the applicant and her teams have conducted two pilot studies exclusively on trust, quantitative and qualitative, to investigate different aspects of trust in different settings, thus paving the way for a larger investigation which will result in theory building and innovation. The findings of these investigations have been submitted and are currently under review for publication in peer reviewed journals. They have also been presented in international conferences under 'innovation', i.e. The Person-centred Experiential Conference in NY, 2016 and in the European Conference in Positive Psychology, France 2016. In summary our previous work has indicated the following:

- Interpersonal trust mediates the association between experience of adversity/life events and pro-inflammatory, and cell necrosis biomarkers. Thus, it can be key in aiding recovery from adversity, preventing illness process, and promoting wellness, i.e. could potentially act as a 'psychosocial vaccine' [7]
- Trust is key in recovering from severe adversity, psychological injuries, and crisis. [8,9,10,11]
- Trust is a crucial part of any professional relationship and is central in helping people engage in the therapeutic process, thus facilitating better longer term outcomes and minimising risks in therapy [9,10,11,12]
- Trust is potentially a key factor in preventing people from dropping out from psychological therapy/counselling, a serious problem in mental health services with significant social and financial implications [13]

The clinical workshop has been developed on the basis of the above research findings and is being updated concurrently with our research as new findings emerge. It has been piloted in Scotland (May 2016), Hong Kong (March 2016), Greece (May 2016), and France

(November 2017) with great success, i.e. 100% increase in awareness of attendees, 100% of attendees being very satisfied with content, style and format as per evaluation. . The proposed version will be the most updated one, embedded in the most recent recent findings.

*Content:*

**Theoretical part**

- Introduction to trust: new definition, empirical data & evidence based clinical framework
- Exploration multiple aspects of trust in adversity, recovery & growth

**Experiential part**

- The experience of trust and its ruptures in life and in therapeutic process, via exploratory questionnaires developed for the purposes of this workshop
- ‘Trust Lab’: experiential explorations, trust/mistrust histories, via demonstrations featuring action techniques, and case examples
- Round table discussion on the application of interpersonal trust in different

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## **Beyond Questionnaires: New Approaches to Generating Strengths-Based Narratives and Facilitating Positive Relationships**

**Facilitators:** *Michele Deeks*<sup>1</sup>, *Martin Galpin*<sup>2</sup>

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**Keywords:** gratitude, strengths, reflective writing, appreciation, qualitative feedback, narrative, at my best, practical, tools, positive culture, positive relationships

*Learning outcomes:* Following this workshop, delegates will be better able to identify when to use questionnaire-based tools and when to consider alternatives. They will also have a good understanding of some online and offline narratively-driven tools, which they will be able to use personally and professionally to build self-awareness, self-compassion and gratitude.

*Background:* When it comes to practical tools, online strengths questionnaires still dominate the positive psychology field, but are they always the best tool for the job? In this workshop, we argue that, in some situations at least, we should make more effort to consider the alternatives.

While the majority of users find strengths questionnaires, and the associated outputs, interesting and valuable, practitioners must be careful not to use these tools as a default option. Numerically driven processes come with some risks, e.g. empowering the professional more than the client, encouraging a focus on detailed descriptors or steering conversation in a more negative direction by focusing on ‘lesser’ or ‘over-played’ strengths.

In this workshop we will introduce some alternative tools for reflecting on strengths. Based on a more narrative approach, the tools avoid some of the limitations of survey-based approaches. We will explore how they can be used to build greater self-awareness, contribute to self-compassion and strengthen interpersonal relationships.

The methods used will be applicable across a range of contexts, including coaching, teaching and management.

*Content:* This will be a highly interactive session that provides both personal and professional benefit. Through reflective writing, paired discussion and use of free online tools (internet connection allowing), delegates will be taken through a series of processes to build their own narrative around who they are at their best. They will also take time to reflect on what they most appreciate about a person that they know, so that they can (if they wish) express that gratitude.

The mix of activities will provide personal benefit and insight, while simultaneously introducing practical approaches that can be used with clients, colleagues, students, friends and/or family.

Throughout the workshop we will share key pieces of theoretical background that underpin the tools, while ensuring that the balance leans towards practical engagement.

N.B. The session design will ensure that the activities are not wholly reliant on an internet connection.

## Character Strengths, Mindfulness and Physical Activity in Preschool and School – a Design-Based Research Project

**Facilitators:** *Sanne Feldt-Rasmussen*<sup>1</sup>, *Kristian Rasmussen*<sup>2</sup>

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**Keywords:** applied positive psychology, character strengths, mindfulness, physical activity, age 5-15

*Learning outcomes:* The participants will receive hands-on activities and relevant tools making it possible to implement the design in their own context.

*Background:* The study is a design-based research project funded by the municipality of Haderslev in Southern Denmark. The municipality faced severe problems related to inclusion in pre-schools and schools. Consequently, a collaboration between the municipality and the research group was initiated and a design was developed. The design combines positive psychology, mindfulness and physical activity aiming to create inclusive learning environments focusing on a resource perspective. On a weekly basis teachers and pedagogues follow a specifically designed program introducing character strengths combined with mindfulness and physical activities reflecting the character strength in question. After pilot-testing the design in two pre-school groups and two school classes in 2015 the design was further developed and tested in additionally four groups/classes in 2016. In 2017 the design was further developed and 45 new groups/classes were included. The design and its outcome has been and is currently being evaluated and documented through empirical data consisting of semi-structured interviews (25 teachers, 25 pedagogues and 60 children), field observations, national test in Danish and Math, and national obligatory questionnaire on well-being. In addition, the long-term effects are studied based on questionnaires. The project has shown positive results within the following areas; concentration, social skills, language skills, inclusion, learning and well-being. The municipality has recently launched a strategy with the ambition to implement the project throughout the region.

*Content:* The practical workshop presents the didactical model of the design and introduces the theoretical *Background:* The participants will experience the combination of character strengths, mindfulness and physical activity by hands on activities and age-related perspectives.

### Acknowledgments

The municipality of Haderslev, school and institutions in the municipality of Haderslev.

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## Win-Win-Win @ the Workplace

**Facilitators:** *Nina Hanssen*<sup>1</sup>, *Merethe Dronnen*<sup>2</sup>

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*Learning outcomes:* Techniques to increase engagement, productivity and create win-win-situations for employees, leaders and organizations.

*Background:* A positive work environment with engaged employees are much needed and wanted organizations today. Organizations with engaged employees have reduction in absenteeism, increase in productivity and reduction in turn-over (Harter& Mann 2017). People are the organizations greatest assets.

What are the elements that engage workers and drive results? and what can be done to increase engagement, productivity and create win-win-situations for employees, leaders and organizations? What are characteristics of thriving employees and organizations that make people thrive?

In Google Corp., the keywords are flow and trust. Google believes that people perform at their very best when they are in flow. It's not about getting your employees to run faster, work faster and sweat more - but to help them utilize their abilities and skills. In order to flourish, employees need to have room for play and support to use their resources in the best possible way. Research shows that in spite of increasing stress in our society some people manage to create their own flow zones in the middle of chaos. To experience flow on an individual level you must find a balance between challenge and skills. Flow works as a mental retreat where there is no room for negative feelings or thoughts.

In this workshop we will see how different positive psychology factors like for instance flow and creativity are some of the key factors to create a win win win workplace.

*Content:* Learn, through concrete engaging examples some techniques that you as a leader or employee can use to increase your employee engagement, and thereby increased productivity, lower absenteeism and turn-over. Learn how to experience flow @ the Workplace.

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## The Positive Journal: Putting the Psychology of Happiness onto the Page and into Practice

**Facilitator:** *Megan C. Hayes*

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*Learning outcomes:* Learning outcomes of the workshop will be:

- Current perspective on research in writing and wellbeing
- Awareness of the ways writing is currently used in wellbeing contexts
- Understanding of how positive psychology (PP) might be applied in these settings

Practical tools gained from the workshop will be:

- A range of writing exercises for use with self and others
- A pragmatic, holistic, and highly adaptable model for applying PP

*Background:* “What do you want your life to be?” This was the question asked by Jungian analyst, Ira Progoff, in his seminal 1975 book, *At a Journal Workshop*. This text systematised personal writing into a complex programme of expressive and creative exercises and meditations, typically undertaken over several weeks in a group setting. Little empirical evidence supports the practice, yet it remains in wide use today.

The present workshop brings Progoff’s claims (that the journal offers a profound platform for psychological growth) under the microscope of empirical positive psychology, to propose an alternative model of journal writing: the positive journal.

A wealth of theoretical evidence supports the value of personal written expression across the sciences, literature, and philosophy. In the late eighties and nineties, through the influential work of James Pennebaker (1997) writing at last became a topic of rigorous empirical study—thus gaining a certain scientific merit to underpin its already widely accepted value as a self-development tool.

This workshop takes a global view across empirical research by Pennebaker and colleagues into the benefits of ‘expressive writing’ (Pennebaker & Beall, 1986), as well as research into positive journal writing (Hayes & Hefferon, 2015), classic research on psychodynamic approaches to writing (Progoff, 1977), and finally research in creative writing and wellbeing (Hunt & Sampson, 1998).

The central aim of the workshop is to help participants synthesise writing research with the field of PP—presenting personal journal writing as a vehicle for effectively applying PP in various contexts and settings.

*Content:* Part One: Short seminar and discussion

The workshop will begin with an open discussion of current research in writing and psychological wellbeing, offering participants a window into this broad and evolving field as well as—importantly—why this research could be of potential import to practitioners in the field of positive psychology.

Part two: Individual exercise and follow-up discussion

Participants will then be invited to try several practical writing exercises themselves—ranging from standard expressive writing, to more positive forms of writing, to creative writing. There will be a follow up discussion regarding the potential benefits of using these various writing tools with others—be they research participants, patients, analysts, coaching clients, or others.

Part three: Group exercise and follow-up discussion

Next, participants will be put into groups and encouraged (with prompts and support from the facilitator) to think of novel ways that current PP research might be applied through the vehicle of writing, and to design a brief writing exercise themselves. Participants will have the option to feedback their ideas to the group, and to choose to have their exercise compiled online for all participants to access following the workshop.

Part four: Final discussion and feedback

The workshop will end with a discussion of how valuable, or indeed viable, the concept of a positive journal might be in various contexts—as a self-development tool or as part of a toolkit for positive psychology practitioners.

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## Bringing Emotions to Life: Increasing Emotional Awareness and Agility

**Facilitator:** Sue Langley

CEO, Langley Group, Australia, e-mail: sue@langleygroup.com.au

*Learning outcomes:* In this workshop, participants will take their emotional awareness, understanding and agility to the next level. Using experiential activities and tools, we will explore how to bring to life:

- Understanding of the range of emotions how the energy of emotions impacts cognitive function
- Using emotions through physiology to generate outcomes both cognitive and relational
- Exploring emotional labour and the impact on mental health and wellbeing
- Understanding the universal and individual emotional triggers
- Exploring the progression of emotions and how to both identify and handle that progression
- Using experiential activities that can be used individually and in groups to improve learning about emotional agility and the power of all emotions in a fun, evidence based way

*Background:* This workshop is based on research in Positive psychology, which embraces all emotions, even though the media would sometimes suggest otherwise. Being about to use our emotions intelligently involves generating and integrating them to enhance thinking, reasoning, problem solving and creativity. We need to help people increase their awareness, understanding and ability to handle all emotions.

Whilst many researchers and practitioners understand positive psychology concepts, often the deeper knowledge of the science of emotions has not been explored in conjunction with the ability to bring them to life through tangible means.

Positive moods help with creative tasks, generating more receptive, big picture thinking and a greater number of options. They improve our ability to absorb information, make richer interpretations, manage complexity and solve problems collaboratively and productively. Positive emotions also broaden and build thought-action repertoires, enhancing intellectual, physical, psychological and social resources over time. Neutral or slightly negative moods result in a more careful, systematic, bottoms up processing and better-quality arguments, which are important in evaluating creative output.

Emotions impact our body and our brain, there are universal triggers, rules and progressions to emotions, as well as a smorgasbord of strategies to build emotional agility and resilience

This workshop will focus on bringing these emotions to life, using expertly designed tools and experiential activities to increase real world application.

*Content:* Sue Langley will explore emerging research, approaches and tools to help people increase their awareness, understanding and ability to handle all emotions. Drawing on her expertise training coaching practitioners, consultants and leaders, she will translate research into practical applications and share successful strategies.

Participants will explore universal and individual emotional triggers as well as how to intervene through body and brain based strategies to halt the progression of emotions not serving them.

Sue will link emotional vocabulary to self-regulation and reference the work of renown neuroscientist Matthew Lieberman [1] as well as work of noted emotion researchers Joseph Forgas [2] and Peter Salovey [3] around the energy of emotions, and many others.

This will be supported with activities using emotions cards and intensity cards to help build emotional vocabulary to increase emotional perception, understand emotional complexity and build emotional agility and resilience.

The workshop will be fun, engaging, and based on science and evidence from a range of noted researchers. The content will be shared in a way that builds learning and understanding and the ability to use these tools and activities in real life, with real clients.

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**Workshop Abstract Title:****Building Bridges in Budapest – Integrating Positive Education and Restorative Justice for Whole School Well-being****Facilitators:** *Clive Leach*<sup>1\*</sup>, *Richard Dyer*<sup>2</sup>, *Sarah Ford*<sup>3</sup><sup>1</sup>Global Representative International Positive Education Network (IPEN), London, United Kingdom, \*e-mail: coach@cliveleach.com<sup>2</sup>Principal, British International School Budapest, Hungary<sup>3</sup>Assistant Head and Head of Sixth Form, British International School Budapest, Hungary**Keywords:** positive education, restorative justice, well-being*Learning outcomes:*

- Understanding of the requirements for well-being and engagement
- Introducing Positive Education
- Crossing the bridge between Positive Psychology and Restorative Justice to enhance well-being

*Background:* 'Positive Education is the application of well-being science in educational settings with the aim of creating flourishing students, staff and whole school communities' [1].

In a volatile and uncertain world, applying the principles of positive education to the daily practices of schools is more crucial than ever. It is incumbent on schools to ensure that such education is underpinned by proven, well-understood systems that create cultures and practices characterised by integrity and effectiveness.

*Content:* Drawing on Positive Organisational Scholarship, this unique and experiential workshop will bring to life a model [2] that has been successfully applied in schools to provide a framework for creating climates for positive and sustainable change to ensure both well-being and engagement within the community. This will include sharing practitioner experience in the design, delivery and roll-out of Positive Education programmes in international schools in SE Asia, China and Europe.

Recognising there is no 'one size fits all' approach, an innovative programme at The British International School Budapest will be shared. This programme develops systems and practices for young people, parents and teachers based on principles of Restorative Justice [3] [4]. Drawing upon two-factor theory [5], attention has been paid in the school to motivators and hygiene factors to develop an environment in which restorative approaches can be applied to a wide variety of situations. Individuals do not operate independently of the organisational culture of which they are part. So such organisational factors have been addressed alongside approaches which build both individual and community well-being and engagement.

- Part of the session will take place as a Circle, enabling participants to feel the relationship-building benefit of Circle Time pedagogy in classroom practice
- Participants will experience how a child feels when treated restoratively
- Examples from the school will be shared and time will be given for participants to consider how they might embark on a similar journey in their own situations.

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## Bios

### *Clive Leach*

Clive graduated from the Master of Organisational Coaching Program at the University of Sydney, He has worked extensively in the design and delivery of Positive Education programs in schools, universities and community programs in Australia, Asia & Europe. Clive is a global representative for the International Positive Education Network (IPEN).

### *Richard Dyer*

Richard graduated with an MA in Mathematics from Churchill College, Cambridge, a PGCE from the University of Warwick and an MA in Education from the University of Hull. With a background of over 30 years in international education, Richard is currently Principal of The British International School Budapest.

### *Sarah Ford*

Sarah graduated from Trinity College, Cambridge with an MA in French and German and a PGCE from the University of Oxford. She is currently Assistant Head of the Secondary School at The British International School Budapest (BISB), where she leads the Care & Guidance provision for students aged 11-18.

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## **Finding Light in the Darkness: Reconstructing Meaning after Traumatic Loss**

**Facilitator:** *Susan L. Miller*

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Susan Miller PhD is a registered clinical and counselling psychologist and Co-Director of The Melbourne Counselling & Psychology Centre in Australia and Counselling Asia in Hong Kong. Susan has worked as a clinician and trainer for more than twenty-five years. She has taught at Masters level in counselling programs across Universities in Australia and in Hong Kong and Singapore. She consults, provides training and staff debriefing to private and community organisations as well as various sections of the Department of Justice in Melbourne. She has a particular interest in the integration of reconstructive meaning based therapies and positive psychology.

*Learning outcomes:* As a result of this workshop participants will:

- Understand how principles of positive psychology can be integrated with reconstructive meaning based approaches to traumatic loss.
- Be able to engage in ‘double listening’ to identify points of meaning and strength in the narrative of the past relationship (with the deceased)
- Learn how to use reconstructive meaning and strength-based strategies to work safely with retelling traumatic loss incidents
- Discuss key elements of narrative reconstructive approaches that acknowledge the continuing connection and impact of the deceased while developing client vision for the future
- Discuss solution-focused narrative techniques to assist in the reconstruction of life meaning following traumatic loss
- Consider personal values, strengths, and well-being needs when working with traumatic loss

*Background:* Loss of a loved one typically results in a sense of meaningless, hopelessness and despair. In circumstances of traumatic loss involving for instance, suicide or homicide, the combined effects of grief and trauma intensify emotional pain - shattering meaning of the world, self and others. In the words of a family member of a homicide victim, ‘I didn’t only loose my wife I lost my view of the world, of people as essentially good. That’s what I’m most angry about’. The healing effects of meaning and strength-based approaches to trauma and grief have been widely supported in the clinical case study literature.



*Content:* The contribution of positive psychology and integrated reconstructive meaning based approaches in facilitating coping, resilience and hope in clients facing extreme suffering due to traumatic loss is explored. This is theory and practice within a hands-on interactive environment. Actual case material is utilised to explore therapy process and strategy. Supportive group exploration and dyadic practice of technique facilitate learning. Experiential respectful practical exercises facilitate participant experience of therapy strategies and application (such as narrative questioning techniques, double listening, impact mapping and so on). Practitioner well-being is a key element.

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## How to Teach Giving for Student and Staff Well-Being

**Facilitator:** *Thomas W. Nielsen*

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**Keywords:** giving, wellbeing, engagement, education, applied

*Learning outcomes:* Upon the completion of this workshop, participants will be able to identify:

- An evidence base of giving and meaningful happiness
- Practical strategies for increasing giving to self and others
- Case study research and examples of giving in educational settings

*Background:* Values education, service learning, and positive psychology research has shown that giving and being something for others—the ‘meaningful life’—is one of the best predictors of promoting individual and communal wellbeing in the classroom, as well as academic diligence and success (Lovat, Toomey, Clement, Crotty, & Nielsen, 2009). This workshop is based on empirical research in Australian schools identifying pedagogical tools for promoting giving among children and young people (Nielsen, 2011; Nielsen & Ma, 2016).

*Content:* The workshop includes the teaching of a model of five layers of giving ecology, four modes of giving pedagogy, and twelve evidence-based strategies for giving to self (captured in the acronym SELF CARE AIMS). The training of the effective use of this ecological model, pedagogical modes, and self-care strategies will be carried out via three modules:

### Module 1

- Conceptualising a new paradigm from the evidence around giving and the ‘meaningful life’
- Background of how the practical tools offered in this workshop arose

### Module 2

- Practical application and examples of the Five layers of Giving Ecology
- Practical application and examples of the Four modes of Giving Pedagogy
- Practical application and examples of twelve strategies for giving to self (SELF CARE AIMS)

### Module 3

- Going forward: principles and strategies for how participants can take the ideas and tools of this workshop into their own setting/ organisation.

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## Practices to Build Wellbeing Literacy

**Facilitators:** Lindsay G. Oades<sup>1,2\*</sup>, Gavin R. Slemp<sup>1,2</sup>, Hanchao Hou<sup>1,2</sup>,  
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**Keywords:** wellbeing, wellbeing literacy, positive education, health promotion, workplace wellbeing.

*Background:* Relationships are central to wellbeing. Language is central to relating and hence any attempt to improve wellbeing will likely involve language. Literacy may be defined as the control of the use of language [1]. Literacy is, by definition, learned. Wellbeing literacy is defined as *the control of the use of wellbeing language* [2] [3]. Language can be understood as texts, different modes of communication [4]. Comprehending texts involves reading, listening and viewing. Composing texts involves writing, speaking and creating. Wellbeing literacy involves how we control the use of wellbeing related language in these six texts. By conceiving of wellbeing related learning as a literacy new opportunities become available beyond traditional intervention approaches adopted in positive education [5], health promotion or workplace wellbeing initiatives. Wellbeing literacy is a generalizable capability underpinning higher order interventions. Moreover, wellbeing literacy is likely to be a necessary pathway between wellbeing interventions and wellbeing outcomes.

*Aim:* The aim of this workshop is to enable participants to explore wellbeing literacy in manner relevant to their personal experience and current work context; particularly education, health or organizational contexts. Participants will gain knowledge of the concept of wellbeing literacy and understanding of wellbeing literacy related practices across the six texts: reading, listening, viewing, writing, speaking and creating.

*Method:* The workshop will use personal and professional experiences as a way of understanding wellbeing literacy and practices to build wellbeing literacy. Practical workshop learning exercises will include the six texts enabling participants to tailor their learning to personal and professional relevance. The method will be a combination of Kolb's Experiential Learning Cycle (starting with participants' experience), systems theories (coming from multiple perspectives of a person within a system without predefining an outcome) and a constructivist epistemology (viewing language as a construction rather than representation of reality).

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## **MAPP Somatics and Fitness Strategies: Let Me Hear Your Body Talk**

**Facilitator:** *Elaine O'Brien*

Lifestyle Medicine Coaching, Training, Strategies: Move2Love IPPA Positive Health and Wellness Leadership, United States, e-mail: PositiveFitLab@gmail.com

Vibrancy is a quality of harnessing zest, enthusiasm, and vitality. At home, work, or at play, positive energy, self-determination (Teixeira, 2012), and aerobic activity daily can prime health and wellbeing across the lifespan (O'Brien, 2013, 2016). The quality of vibrancy, especially via exercise, can also help shape images of aging, emphasizing growth, grace, openness, and strength. Because physical activity boosts our physiological reserve, and offsets declining physical function resulting from disease, disuse, and natural aging, exercise supports our being “chronologically older” in a much more favorable way. Through body, brain and movement science, we can improve our functional age, quality of life, health and optimism as we move with into our 60s, 70s, 80s, 90s, and 100s.

Research, theory, and practice from Dr. O'Brien's award winning program, *FitDance*, will be presented, along with an embodied, rhythmic experience designed to uplift mental health, physical comportment, and well-being. Join in and experience the science of fitness in action and appreciative movement (O'Brien, 2015).

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## The Battle against Boredom in Schools

**Facilitators:** *Nanna Paarup*<sup>1</sup>, *Mette Marie Ledertoug*<sup>2</sup>, *Nadia Holmgren*<sup>3</sup>, *Louise Tidmand*<sup>4</sup>

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### *Learning outcomes:*

- Knowledge of boredom
- Perspectives on healthy and unhealthy boredom
- A model for battling boredom in schools
- Hands-on experiences and exercises to minimize boredom and maximize optimal learning.

*Background:* Turn down the volumecontrol on boredom in schools and turn up engagement and optimal learning!

A lot of students are bored in schools. In Denmark 26 % of the students are bored so often and to such an extent, it threatens their learning, health and well-being. International research shows even higher percentages. Boredom seems to be part of the everyday life in school accepted of students, teachers and parents' as "It is just the way it is". But boredom not only affects the students well-being in a few minutes a day, it also affects the way they learn, the quality of their learning and their motivation for further education. And it does not have to be this way. In traditional education we are missing the opportunities to create learning the students find engaging, meaningful and applicable in other areas of life.

In this workshop the presenters will demonstrate how to battle boredom - and they invite you to join. Based on research and best practice of learning, engagement and boredom, the participants will be introduced to a wide range of ways and tools to address boredom in schools and education. The workshop will include hands-on exercises targeting students, teachers and school environment.

### *Content:*

- Introduction to research on boredom and optimal learning.
- Introduction to a PERMA-based model for battling boredom.
- Hands-on exercises to reduce boredom based on:
  - Positive emotions
  - Engagement
  - Relations
  - Meaning
  - Accomplishment
- Transfer to own practice
- Key learning points and take-away

The workshop is based on the book “The Battle against Boredom” (in press March 2018) written by the presenters. The workshop is organized with strategies from Cooperative Learning, engaging all participants in discussions, reflections and hands-on experiences allowing the participants the possibilities to share knowledge and practice internationally.

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## Romance and Research: Responding Well for Relational Well-being

**Facilitators:** *Suzann Pileggi Pawelski*<sup>1</sup>, *James O. Pawelski*<sup>2</sup>

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Positive psychology research indicates that one of the most important factors in human flourishing is building close relationships with others. In fact, Christopher Peterson coined the term “other people matter” to describe the foundational finding of positive psychology, and Martin Seligman designates “relationships” as a key pillar in his PERMA model of flourishing. Romantic relationships, in particular, have an enormous influence on our well-being. Yet as divorce rates indicate, it is not always easy to maintain a long-term healthy relationship. And of the relationships that do stay intact, many are merely languishing rather than thriving. Can positive psychology help couples strengthen and sustain their relationships? Although there is as yet no comprehensive response to this question, there are a number of promising findings and research streams that can be applied to romantic relationships.

In this interactive workshop, designed for anyone interested in exploring ways of applying positive psychology research to relationships, we will focus on the importance of responding well in relational interactions. Although interventions in positive psychology typically focus on how we can initiate more positivity in our lives, in relational contexts it can be just as important how we respond to what others initiate. Integrating ancient philosophical wisdom from Aristotle with contemporary scientific research by Sarah Algoe, Shelly Gable, John Gottman, Christopher Peterson, Martin Seligman, and others, we will consider the evidence for the importance of responding well in relationships and will put research results into practice through fun and powerful exercises. We will also introduce our Interaction Model of strengths that we have developed to help couples relate better to one another.

### *Intended Audience*

Researchers, Practitioners, Students – anyone interested in exploring ways of applying positive psychology research to relationships.

### *Outline*

1. Aristotelian Friendships
  - A. Explain Aristotle’s distinction among friendships for pleasure, utility, and virtue
    1. Relationships Rules
      - a. Golden Rule – upsides and downsides
      - b. Platinum Rule – upsides and downsides
      - c. Aristotelian Rule
    2. The importance of prioritizing virtue
    3. Optimal functioning
    4. Responses to friendships
      - a. pleasure – when pleasure ends, friendship ends



- b. utility – when gain ends, friendship ends
  - c. virtue – friendship for the good of the other person; tend to be more enduring
- B. Aristotelian Friendship Exercise
- 1. What type of friendship underlies your relationship?
  - 2. Bids in relationships (John Gottman)
- A. Discuss the importance of emotional bids and responding to bids
- B. Reflective exercise on how attendees respond to bids in their relationships
3. Active Constructive Responding (Shelly Gable)
- A. Presentation of Shelly Gable’s findings on the importance of responding in positive ways to partners’ reports of success
  - B. Exercise to help attendees understand experientially the difference in various ways of responding
4. Interactive Model (Suzann Pileggi Pawelski & James Pawelski )
- A. Explanation of Model
  - B. Application to Strengths
    - 1. The importance of other-focused gratitude (Sarah Algoe)
      - a. Exercise for expressing other-focused gratitude
    - 2. Becoming a strengths enabler
      - a. Homework exercise: this week, focus on helping your partner develop their strengths

*Learning Objectives*

- 1. Understand and evaluate the theoretical and empirical case for the significance of responding well for relational well-being.
- 2. Analyze one’s own relationships in light of the research.
- 3. Develop strategies for improving one’s responses in one’s own relationships.

*Examples of Exercises*

This workshop is balanced between the presentation of content and the application of that content through interactive exercises. We intend to include five exercises, including a homework challenge. We describe these exercises here:

1. Aristotelian Friendship Exercise

We will invite attendees to consider a current, past, or anticipated/desired relationship. To what degree is this a relationship of pleasure or of utility? What are the upsides and downsides of these types of relationships? To what degree is this relationship a relationship of virtue, where the emphasis is on mutual growth toward optimal functioning? What are the advantages and challenges of relationships of this sort? How might Aristotelian insights and positive psychology research help support you in this relationship?

## 2. Bids and Responses Exercise

Attendees will be asked to consider a current, past, or anticipated/desired relationship. What are the sorts of bids that are made in that relationship? Which ones are answered easily? Which ones are not answered so easily? How might that relationship be improved by attending more carefully to how various bids are answered?

## 3. Active Constructive Responding

We will present the four kinds of responding identified by Shelly Gable in her research: Passive Destructive, Active Destructive, Passive Constructive, and Active Constructive. We will then invite participants to try out each of these responses to see how they feel. Finally, we will invite them to consider their relationships and practice how they might use active constructive responding more frequently.

## 4. Other-Focused Gratitude Exercise

We will invite participants to practice delivering self-focused vs. other-focused gratitude and discuss how this feels. We will also brainstorm best practices for delivering other-focused gratitude effectively.

## 5. Strengths-Enabling Homework Exercise

Seligman, et al. (2005) found that when participants put their signature strengths to use in new ways for a week, it made them happier and less depressed. This exercise is similar, but focused on one's partner. How can you enable your partner to practice their strengths in new ways for a week? (Key here is enablement, not force or manipulation.)

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## **Intentional Practice as a Method to Design and Implement High Impact Positive Psychology Interventions Contextualised to Client or Setting**

**Facilitator:** *Ivan Raymond*

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*Learning outcomes:* Participants will acquire:

- An understanding of intentional practice as a method and framework to strengthen positive psychology intervention design and implementation.
- An understanding of key implementation science principles and how intentional methods can be applied to support the delivery of safe and higher impact intervention outcomes across both program design and clinical/coaching settings.
- An understanding of how intentional methods, and the underpinning logic modelling (Life Buoyancy Framework; Raymond, 2018), has been applied across a range of positive psychology settings, including clinical, trauma-informed, educational and program design.
- Core skills to design a logic model that operationalises a positive psychology intervention nuanced to their context and clients.
- Knowledge and skills to design an implicit or explicitly delivered positive psychology intervention that is mapped to the building blocks of (1) awareness, (2) skills and (3) mindsets.

Trainees will be provided access to core intentional practice tools and models that sit within the public space, including logic modelling (Raymond, 2018) and building block staircases (Raymond, I., Iasiello, M., Jarden, A., & Kelly, D., in press).

*Background:* Through a PhD Program, the author developed a framework (titled Life Buoyancy Model; LBM) and implementation methodology (intentional practice) to strengthen the impact and fidelity of wellbeing, behavioural and positive psychology interventions (Raymond, 2018). The LBM is a categorising logic model that is designed to be populated with specific intervention outcomes mapped to the categories of (1) awareness, (2) skills and (3) mindsets, as well as the articulation of specific implicit and explicit teaching methods mapped to the outcomes. The modelling articulates three key processes (validation, curiosity and coaching) that activate the growth or learning properties of positive psychology interventions. Intentional Practice is an umbrella term that refers to any intervention where the supporting adult (or program/institution) brings moment-to-moment awareness (or mindfulness) of the desired outcomes (“what”) and associated processes (“how”) within the intervention (Raymond, 2018). It represents a method that brings individual, program and institutional awareness to three key questions:

- **What** is the intent or energy being brought to an individual relationship or intervention process?
- **What** outcomes is the intervention designed to achieve?
- **How**, or by which method, is the intervention delivering these outcomes?

The modelling and approach is embedded within the implementation science literature and is designed to bring awareness to key factors that support the delivery of safe (non-harmful) and higher impact intervention outcomes. The approach has particular utility for positive psychology intervention design, as it can be operationalised by clinical and non-clinical audiences, and can be used to guide the design and implementation of both explicit and implicit learning strategies. The modelling also supports key wellbeing and positive psychology skills/outcomes (e.g., growth mindset, mindfulness) to be broken down into smaller building blocks of growth that can be brought to focus within intervention design (Raymond et al., in press). Across Australia, the methodology and modelling has supported the design of a range of positive psychology interventions including:

- Multi-site resilience and wellbeing skills training for disadvantaged young people (Raymond et al., in press; Raymond et al. submitted)
- Clinical and coaching case planning and formulation (Raymond, I. J., submitted a).
- The design and implementation of growth-focused and trauma-informed practice approaches (Raymond, I. J., submitted b).
- Whole-of-school wellbeing and positive psychology interventions.

*Content:* The 90 minute workshop will be divided up into three key components:

- Introduction to Intentional Practice and Modelling (30 minutes)
  - This section will include explicit teaching on implementation science principles (including integrity/fidelity), intentional methods, core models and applied examples of intentional practice.
- Guided Development of a Logic Model or Intervention Plan (30 minutes)
  - Participants will be guided and coached to develop a logic model of a positive psychology intervention that is nuanced to their setting, client/s or context. They will be coached and trained to map specific intervention outcomes ('what') with both implicit and explicit teaching methods ('how').
- Guided Development of a Building Block Staircase (30 minutes)
  - Participants will be guided and coached to populate a building block staircase that breaks down a larger positive psychology outcome or skill through the building blocks of (1) awareness, (2) skills and (3) mindsets.

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## Beyond PERMA: Emerging Models Creating Choice and Innovation in Positive Education for Successful Application & Sustainability

**Facilitator:** Paula Robinson

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**Keywords:** positive education, model, application, sustainability, PERMA

*Learning outcomes:* Participants will be able to take away 6 practical model applications that have been successfully implemented in schools as well as detailed guidelines on the process of how to design their own evidence-based model.

*Background:* In 2011, Seligman's PERMA model supplied Positive Psychology with a solid foundational framework to design, apply and embed wellbeing activities and practices in work, life and school contexts. When asking schools and their staff to get on board with wellbeing programs and interventions, choosing a framework (or model) is an important step as it provides an easy to understand structure to support the process and embed the principles of Positive Education into the day-to-day teaching and non-teaching activities. Since PERMA, additional evidence-based, generic wellbeing models have emerged and are now being successfully applied in the education sector. Further, many schools are now also taking a more tailored approach to positive education - one that reflects their own school context and positive education goals.

*Content:* This workshop will discuss 3 real-world case studies of schools that have adapted, customised and designed their own evidence-based positive education models with careful consideration to school ethos, culture, values, context and unique identity. In addition, participants will learn about 3 generic models as an alternative to PERMA. All school case studies featured in this workshop have had measurable, successful outcomes from the design and implementation of their models to achieve buy-in from staff, students, parents and the wider school community.

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## Positive Communities to Sustain Positive Education: Case Study Examples from the Frontline

**Facilitator:** *Paula Robinson*

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**Keywords:** community, policy, sustainability, practice, application

*Learning outcomes:* Specific learning outcomes for participants will be to gain an understanding of (a) the latest research on community-based wellbeing initiatives; (b) how to measure a community-based wellbeing initiative; (c) case studies from Australia and overseas, and (d) articulate the benefits of evidence-based community wellbeing initiatives.

*Background:* Governments and community leaders are realising the powerful economic and social benefits of positive mental health and wellbeing from a whole community perspective. Most members of a community realise that ‘*it takes a village to raise a child*’ so healthy and happy children become healthy and happy adults who are more productive and contribute to a healthy economy locally and nationally (Noble & McGrath, 2016). Therefore, there are increasing benefits for Positive Education strategy and practices to involve the wider community including government representatives. To achieve this often requires private sector leadership, a compelling business case, measurement, a systematic plan and an effective implementation strategy that can be applied and sustained. Whilst all communities vary, many of the local government challenges are similar; therefore a layered approach for sustainability is required. For example, local preschools and schools, parenting awareness and support, grandparents and retirees’ involvement, local business buy-in, and public health advocates are all crucial stakeholders in the process.

*Content:* This workshop highlights the latest research, advice from experts in the field and case study examples of those applying wellbeing initiatives within their broader communities and local governments right now.

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## Emotional Mapping – Discovering the Power of Places in the Promotion of Well-Being

**Facilitators:** *Viola Sallay<sup>1</sup>, Tamás Martos<sup>1</sup>*

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**Keywords:** emotional mapping, environmental psychology, well-being, assessment, intervention, workplace

*Background:* We all have experiences with places that are important in our life: our childhood places, places of our love stories and places of successes, crises, low and high times we had. Moreover, as environmental psychology asserts, we actively use certain places to regulate our emotions and to achieve the best possible level of our well-being through visiting or shaping significant places. In sum, emotional experiences are place bound and this feature can be used to discover and understand the complexity of a person's emotions.

*Aim:* In the workshop we present a new assessment and intervention technique, the Emotional Map based Interview (EMI). EMI can be used to understand a person's emotions, emotion laden behaviour and relational processes at a certain place. For example, through EMI based assessment we can evoke emotionally significant experiences related to one's workplace and thus we can get insight into the factors that may influence well-being and well-doing in work. Consequently, the recalled experiences can be used to build strengths as well as to modify behavioral and relational patterns.

*Method:* Workshop participants will have the opportunity to make self-experience with the technique, as well as learn case study examples and practical information on the assessment and intervention with EMI based procedures. At its core, EMI is a projective method informed by systemic thinking and environmental psychology as well. When used in organizational settings, employees are asked to draw a layout of their own workplaces and to assign predefined positive and negative emotions to the layout according to their own experiences. The adjacent interview focuses on these emotions and on the connected emotional and relational dynamics. Workshop participants will be given detailed presentation of the interview procedure and the possible methods of working with the elicited experiences.

*Conclusions:* EMI as an assessment and intervention tool is excellent in bringing up deep and important emotional experiences with a certain place. For example, when applied in an organizational context, it provides useful information for promoting employee well being. EMI combines the resource centeredness of positive psychology with the holistic approach of environmental psychology and systemic therapy.



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## ***Learn it, Live it, Teach it, Embed it: Implementing a Whole-School Approach to Foster Positive Mental Health and Wellbeing Through Positive Education***

**Facilitator:** *Charlie Scudamore*

Institute of Positive Education, Geelong Grammar School, Australia

**Keywords:** Positive Education, wellbeing, school, education

*Learning outcomes:* Participants will gain a practical, applicable understanding of the key features that underpin the Geelong Grammar School Applied Model of Positive Education. The interconnected components of the model will be discussed together with the four key processes that bring Positive Education to life in a school in a sustainable way. [1]

Key findings from independent research on the efficacy of the model will be shared.

Participants will also learn some of the key lessons learned from the first decade of Positive Education – both ‘what went well’ and ‘what went wrong’. [2,3]

Participants will learn of some of the most exciting innovations occurring in schools around the world and hear of the future vision for Positive Education.

*Background:* Ten years ago, Geelong Grammar School (GGS) became the first school in the world to implement a whole-school approach to wellbeing, based on the science of Positive Psychology. Due in part to the pioneering leadership and guidance shared by GGS, Positive Education is now embedded in hundreds of schools around the world – harnessing a scientific approach to supporting the mental health and wellbeing of young people. But, there have certainly been some challenges along the way.

The source of much of this challenge is the high level of complexity inherent in school systems. Any approaches that seek to successfully transform school systems must account for, and adapt to, such complexity. The whole-school approach upon which the GGS Applied Model for Positive Education is based comprises multiple components that promote collaborative, systematic, and collective action across the school system and appear to be successful in accounting for these complexities.

Underpinning the GGS approach are four intentional, interconnecting, cyclical processes; *Learn it, Live it, Teach it, Embed it*. In combination, these processes assist schools in designing and reviewing ongoing implementation.

In this interactive workshop, one of the world’s leading Positive Education practitioners, Charlie Scudamore – GGS Vice Principal, will share what we have learned during the first decade of Positive Education and, in particular, how we are learning to successfully embed the four key processes that bring Positive Education to life in a school.

*Content:*

- Brief historical context of Positive Education – including Professor Seligman’s 6-month residential consultancy at GGS and rationale for Positive Education
- Early attempts at implementation including lessons learned – ‘what went well’ and ‘what went wrong’.
- Sharing these lessons with schools around the world

- Creation of applied, whole-school model
- Interconnected components of the model
- Four processes that bring Positive Education to life in a school
- Applying the model in different contexts and cultures
- The future of Positive Education

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ARTICLE

## Learn it, Live it, Teach it, Embed it: Implementing a whole school approach to foster positive mental health and wellbeing through Positive Education

Erin Hoare · David Bott · Justin Robinson

**Abstract:** Schools provide unique environments for the implementation of interventions to support the mental health and wellbeing of young people. While promising as an intervention setting, the school system is inherently complex, and any successful intervention or programme must account for, and adapt to, such complexity. Whole-school approaches that comprise multi-components and promote collaborative and collective action across the school system appear promising for accounting for these complexities. This paper reports the updated implementation processes of one whole-school approach, the Geelong Grammar School Applied Model for Positive Education, for fostering positive mental health and wellbeing among the school community. Drawing upon existing frameworks and from successes observed in the fields of Social and Emotional Learning, mental health prevention, and health promotion, adapted to meet the goals of Positive Education, we propose four interconnecting, cyclical processes; *Learn it*, *Live it*, *Teach it*, *Embed it*. In combination, these processes assist schools in designing and reviewing ongoing implementation. This study extends the literature to date by synthesising organisational, systems change, education, and anecdotal evidence to identify barriers to implementation and subsequent outcomes of missed, or poorly executed processes. While schools will be unique in factors such as context, specific needs, and available resources, it is envisaged that reporting these processes and potential barriers to success may assist schools with their own future implementation endeavours.

**Keywords:** positive education, student wellbeing, implementation science

### 1. Introduction

There is consensus that optimal mental health should be pursued through both reducing/eliminating psychopathology, and through maximising positive wellbeing [1]. Childhood and adolescence is a critical time for acquiring key skills to support positive mental health and to prevent against mental health problems that may precede mental health disorders [2]. It is known that the first onset of mental disorder usually occurs in childhood or adolescence, however, effective treatment is not usually received until many years later [3, 4]. This age period offers optimal opportunity to promote positive mental health that may support healthy emotional development into adulthood.

Schools provide unique environments for the implementation of interventions to support mental health and wellbeing of young people, given the opportunity for large population reach and due to pre-existing structures for interventions to occur. A school *system* is used to refer to the interdependent components with varied functions that interact to produce outcomes in

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## Intellectual-Dynamic Aspects of Visual Art's Perception to Change Quality of Life

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**Keywords:** visual image, relationships, meaning, creativity, quality of life

*Background:* The psychological potential of Visual Art allows to disclose, by means of an artistic image, a wealth of information regarding human relationships embodied in various models of their behavior [4][8]. Possessing enormous cognitive resources, a person does not fully use her intellectual potential as a method of creating cultural space of a new reality, applying imagination in the context of Visual Art's perception to change the Quality of Life [2][3][5].

*Aim:* of research was to show a significance of the intellectual potential, creativity and strengths to change a quality of life by using Visual Art.

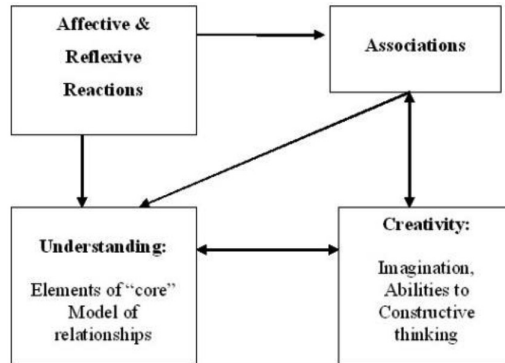
*Method:* We applied "Questionnaire" with a battery of four techniques: for studying the empathic understanding, affective relation, reflexive reaction to a work of art, associative thinking. Projective techniques to reveal the respondents' abilities to imagination. Author version of Inversion's method to positive transform the meaning of relationships in any situation [1][6][7]. "Picture of the World": some representations of our life and future.

Participants: students and teachers in various vocational backgrounds, 110 adults, aged 20 to 60.

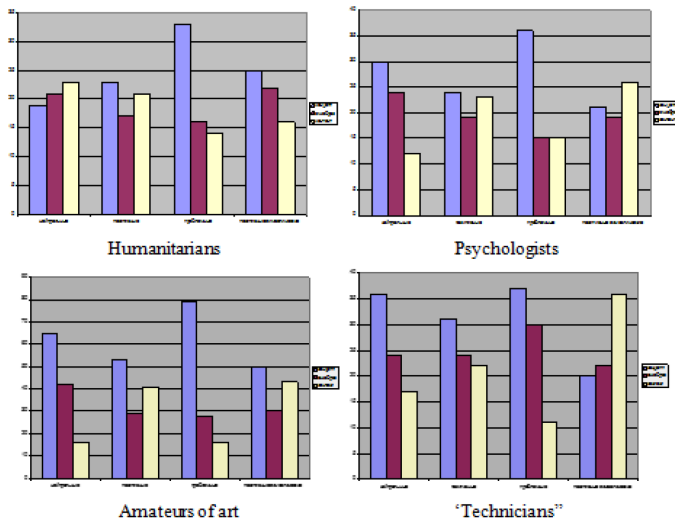
Stimulus was represented by works of art 19-21 centuries. In total were studied 2800 situations on family, love, parental, professional and friendships, "the nature & life", in the context of Personal meaning of the picture „The World of a man“, „The status of man in the World“.

*Results:* You can see on Schema the indicators of emotional value judgment about Visual image and the emotional relation of the respondent to a situation; also the parameter of understanding & imagination (Fig. 1). We revealed the difference in empathic understanding of situations (Fig. 2). The mental image of real status relationships: married, love, family, labor relations and 'nature & life' is understood at the level of concept ( $p=,000$ ). In emotional relationships: parental, love, family relations statistically reliable distinctions in the understanding of the meaning are also found ( $p=,000$ ). In a conflict family situation, scenes of collective work, problem love relations were found similarities in understanding that rely on the stereotypes of the perception. According to the correlation analysis, a relationship was found between affective-reflexive reactions, the cognitive parameter of the empathic understanding of meaning with the parameter of imagination (associative connections with reality) & with art competence and professional education, with success of positive reconstructing meaning (Fig. 3).

*Conclusions:* Manifestation of personal properties of creativity allows a person through the decision of life situations in works of Art to build his Life. The findings of the experiment can be used in educational seminars and trainings in development psychology, social psychology, health psychology and professional activity.



**Figure 1.** Appreciation Visual image of Relations. Structure of cognitive, emotional & creative parameters.



**Figure 2.** The understanding of the meaning, depending on the model of Relationships in the work of Art. 1- neutral, 2- positive real, 3- problem, 4- positive symbolic situations.

Blue - concept, red-sophisticated, white-content.

ESM is an indicator of the level of understanding of the social meaning of the situation: the concept, the emotional image, the content.

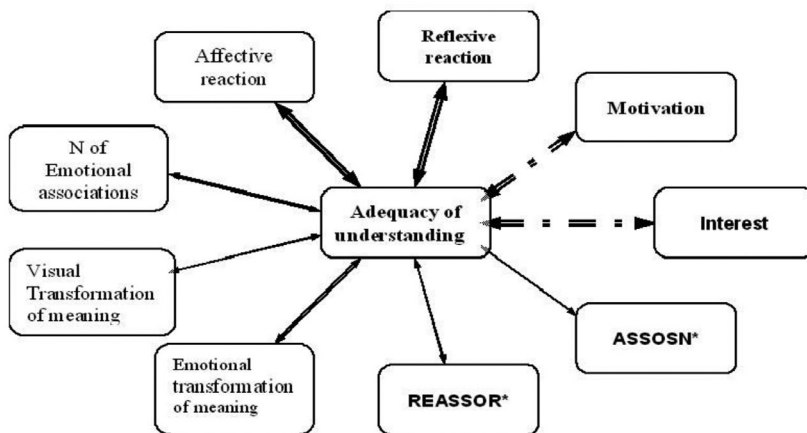


Figure 3. Pleiades of correlations on the “Anniversary” of M. Chagall.

p- 0,001; p- 0,000.

\*Projective methods: abilities to imagination.

**Workshop: Pictures**



Henri Matisse.. «Conversation»



Marc Chagall. « Anniversary».

Figure 4. Pictures of Russian and French painters.

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## Resilient Transitions

**Facilitator:** *Mina Simhai*

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*Learning outcomes:* Participants will learn

1. How to lead with signature strengths in adversity
2. How to show up authentically and mindfully to the reality of any situation
3. How to cultivate practices that sustain us during times of hardship
4. The tend and befriend response to stress
5. How to re-frame our beliefs about stress
6. Strategies for using generosity and kindness to shift from overwhelm to hope
7. How to make post-traumatic growth more likely to occur

*Background:* What does flourishing look like when tragedy strikes? How do we rise after loss? Together, we will explore the science of resilience and practice evidence-based strategies to improve well-being when we face challenges, be they personal, professional or national. As a positive psychology practitioner, presenter, and college educator, Mina Simhai will present research on resilience and post-traumatic growth, guiding participants in an interactive, experiential workshop designed to help participants navigate their own transitions with more ease and grace. This workshop draws on research by 1) Richard Davidson (University of Wisconsin) on mindfulness meditation and resilience, 2) Karen Reivich (University of Pennsylvania) on resilience, 3) Kelly McGonigal on transforming stress, and 4) Richard Tedeschi and Lawrence Calhoun on post traumatic growth as well as recent research on VIA character strengths and resilience.

*Content:* This workshop weaves together research, application, and experiential exercises. Participants will engage in experiential exercises that build our resilience and capacity to weather transitions more skillfully such as 1) how to draw on and lead with a signature strength when facing adversity, 2) mindfulness practices that increase our capacity to be present in difficult situations, 3) actively choosing a mindset to apply to stressful situations. We will also examine research on positive relationships and develop strategies for building social connections that support us during challenging transitions. Participants will learn how to lean towards joy while also being present with the often painful realities of transitions. The workshop will consist of lecture, experiential exercises, guided mindfulness practices, partner exercises and journaling.

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## Embracing the ‘Bad’ along with the ‘Good’ as Part of a Positive Psychology Coaching Dialogue

**Facilitator:** *Ceri M. Sims*

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Dr. Ceri M Sims is a coaching psychologist, senior lecturer and researcher at Buckinghamshire New University, UK where she teaches on the applied positive psychology masters degree programme and runs positive psychology coaching courses.

Ceri is a member of the International Society for Coaching Psychology (ISCP) and British Psychological Society's Special group in Coaching Psychology, is International Editorial Adviser for the European Journal of Applied Positive Psychology and member of the advisory team for the ISCP's International Centre for Coaching Psychology Research. She is also external examiner for the Masters in Coaching Psychology at University College Cork.

*Learning outcomes:* This workshop aims to meet the following key learning outcomes and develop practical tools including:

- An appreciation of developing flexible appreciative coaching methods that embrace both the light and shadow of individuals and systems.
- Skills in expanding an appreciative mindset to working with resistance in coachees.
- Skills in listening appreciatively and creating generative questions for coachees who are facing difficult emotions such as frustration, anger, anxiety, shame and despair.

*Background:* The application of approaches to coaching that embrace the ethos of positive psychology are flourishing, with solution-focus (Cavanagh & Grant, 2014) and appreciative inquiry approaches (Orem, Binkert & Clancy, 2011) offering the means by which coaches can support positive change through adopting a focus on strengths, competences and achievements and moving away from deficit discourse. Whilst these approaches can be transformational, their success depends upon the coaches' ability to adopt flexibility within their chosen models. In particular, the way of being a positive psychology coach involves appreciating with honesty, empathy and care the frame of reference of the coachee. even when they harbour difficult experiences and the language of problems rather than those of hope and possibility.

Positive psychology is moving into a second wave (Held, 2004; Ivtzan et al., 2015; Kashdan & Biswas-Diener, 2014; Lomas & Ivtzan, 2016) or PP2.0 (Wong, 2011), a development that cautions against adopting a polarised view that fails to embrace a nuanced appreciation of the ‘positive’ and ‘negative’ sides of people's lives. Sims (2017) argues that allowing coachees to tell their story to express themselves freely is important and that second wave positive psychology coaching with difficult emotions involves engaging with the coexistence, compatibility and contextual nature of the emotional landscape of coachees when supporting them in their quest towards achieving their goals. The current workshop focuses on

developing constructive coaching tools for embracing the shadow side of coachees and learning skills of creating generative questions that work with difficulties within an appreciative coaching framework.

*Content:*

1. Background to second wave positive psychology coaching – including risks of adopting an inflexible positivity approach.
2. Expanding the appreciative approach to a much broader and person-centered mindset of listening for resistance and difficult experiences that are accompanied by challenging emotions in coachees.
3. Engaging with the shadow as well as with the light within appreciative or solution focused coaching conversations.
4. Developing and practicing generative questions that work with and through the shadow within an appreciative frame to support coachees in recognising their reflected best selves, creative solutions and transformative outcomes.

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## **Avant-Garde Clinical Interventions: The Virtual Gratitude Visit (VGV) & Character Strength Atom**

**Facilitator:** *Dan Tomasulo*

Core Faculty, Spirituality Mind Body Institute, Teachers College, Columbia University; University of Pennsylvania, Master of Applied Positive Psychology Program (Assistant Instructor for Marty Seligman and James Pawelski.) Director, Open Center's New York Certificate in Applied Positive Psychology, United States, e-mail: Dtomasulo@gmail.com

*Learning outcomes:*

1. Describe how positive interventions can be used in clinical and non-clinical populations.
2. Explain and demonstrate a Virtual Gratitude Visit using psychodrama.
3. Explain and demonstrate both a paper and pencil and role-playing use of a Character Strength Atom.
4. Discuss indications and contraindications for their use with different populations.

*Background:* The virtual gratitude visit (VGV) was selected for the inaugural Avant-Garde Clinical Intervention award sponsored by Positive Clinical Psychology Division of the International Positive Psychology Association at the 2017 conference. The technique activates a number of therapeutic elements contained in the literature on gratitude, role-playing, and storytelling and is described for use by clinicians (and coaches) in both individual and group settings. It extends the utility of Seligman's original research (2005) on gratitude through the use of an empty chair technique and psycho-dramatic *Methods:*

The Character Strength Atom is creative arts and role-playing exercise that allows participants to more deeply explore their character strengths use in the past, present and future. It was the topic of an invited article for IPPA's inaugural peer-reviewed newsletter publication, *Clinical Applications of Positive Psychology: An International Perspective*. It extends the repertoire of interventions for character strengths as recently proposed by Niemiec (2017).

*Content:* Clinicians and coaches can learn the application of these interventions within their practice. These exercises are informed by evidence-based research and adopted for use in an experiential component for clients. Participants will learn the effective use of the empty chair, doubling, role reversal and a representational drama. They will also learn what a character strength atom (CSA) is and how to use it to deepen a dialogue about one's strengths. Two version of the CSA will be demonstrated: a creative arts paper and pencil version, and a role-playing one.

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## Positive Psychology in the Classroom

**Facilitators:** *Viktor Tóth<sup>1</sup>, Katalin Dunay<sup>1</sup>, Nóra Lukácsi<sup>1</sup>*

<sup>1</sup>Szent László Secondary School, Budapest, Hungary, e-mail: tanar.mq@gmail.com

**Keywords:** learned optimism, success, well-being, realistic optimism, facts and beliefs

*Learning outcomes:* The participants of the workshop will have mastered techniques and tools well-grounded in positive psychology in order to boost teenager's well-being and effectiveness at the same time and not only in the classroom.

*Background:* The theoretical background we refer to in our workshop is the extensive work of Dr Martin Seligman, Barbara Fredrickson and Mihály Csíkszentmihályi. We have been using their theories and research results of positive psychology and techniques based on these theories developed by Profil Training Ltd. in order to enhance both the well-being and effectiveness of teenagers at school and in their private life, too.

*Content:* One of our team members proved that applying positive psychology methods in the classroom for four years can result not only in well-being but also in outstanding academic achievement. We would like to let the participants of the workshop in on some of the tasks that were used and proved to be crucial in the process of building genuine self-confidence and self-esteem in teenagers.

Some of the topics we touch upon are: personal strengths of students, teenagers' own resources they can resort to, alternative ways of thinking, questions to be asked in order to make students aware of the importance of "thinking outside the box", the ability to distinguish between facts and beliefs.

We are fully convinced that this innovative approach to teaching does not only affect teenagers' well-being and achievement in the classroom but it provides them with the very "psychological immunisation" Martin Seligman [1] mentions as key element against depression.

### Acknowledgments

Special thanks to Profil Training Ltd.

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## **Cultivating a Dynamic Classroom and School Environment: Applying the Research and Practices of Positive Psychology to Foster the Unique Genius of Every 21<sup>st</sup> Century**

**Facilitator:** *Molly Dahl*

YOUTH Positive Education, United States, e-mail: [mdahl@youthpositive.net](mailto:mdahl@youthpositive.net)

As excited as we are about Positive Education and its potential for educational reform and transformation, we don't always know how best to apply it in the classroom. We've read the compelling research and heard the inspiring stories of positive classrooms and student successes. Yet implementation of a positive education curriculum, or even simply applying the practices to your dynamic teaching style, can be just one more thing to do in your already busy day.

This interactive workshop moves you past feeling passionate about Positive Education to jump-starting its substantive application in the classroom. We'll focus on specific, simple, and engaging practices that enable your students to take an interactive, primary role in their learning—a process that later flows outward into their overall well-being and happiness. You'll hear stories of how much students love it and how quickly they buy in, and how it creates and supports happy kids.

The workshop includes experiential mindfulness practices, easy-to-learn, and quick-yet-potent lessons and teaching strategies to take back to your classroom next week. Lessons include: self-compassion, breathing practices to settle anxiety, mindfulness practices to wake up and engage the mind, and simple acts to create a culture of kindness.

You will be able to harness your passion and apply it to the real-world classroom environment of squirming bodies and busy, distractible minds. We'll discuss how to weave the practices of Positive Education into what you're already doing with your students, creating better results with the same (or less!) amount of time and effort. It's the most important "one more thing" you can do as it will improve everything else you're already doing!

If your goal is to bring virtue and character, as well as engaged academics, back to the educational setting, don't miss this compelling workshop.

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**Acceptance and Commitment Therapy and Positive Clinical Psychology****Facilitator:** *Paulo Gomes Sousa*

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Acceptance and Commitment Therapy is contextual Behavior Analysis that uses acceptance and mindfulness strategies, together with commitment and behavior change strategies, to increase psychological flexibility. It is based on Relational Frame Theory, a theory of language and cognition. ACT is a trans-diagnostic model that has been successfully used to treat conditions such as depression, anxiety, PTSD, chronic pain, eating disorders and substance misuse just to name a few. This workshop is going to address the three pillars of ACT and its model of psychological health; The idea that the normal human state is one of distress, rather than distress being pathological. how to have clarity about what is important to you and acting responsibly in line with your values; the importance of cognitive defusion to overcome the natural tendency to regard our thoughts, images, emotions, and memories as sacred and accepting our thoughts and allowing them to come and go without fighting them; being aware of the here and now, experiencing with openness, interest and receptiveness; accessing a transcendent sense of self, the ever-present part of you that observes and experiences.

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## **Positive Psychology and New Authority – A New Approach for Coaching Parents and Professionals on the Education of Children with Mental and Behavioral Disorders**

**Facilitators:** *Philip Streit*<sup>1</sup>, *Martin Wammerl*<sup>2</sup>

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### *Learning outcomes:*

- Participants get an overview over the three basic approaches of Positive Parents Coaching (PYD, PERMA and New Authority) and their common ground.
- Participants can explain why there is a need to combine the three approaches in order to create an effective parental coaching strategy.
- Participants are enabled to use the presented interventions
- Participants can adapt the presented interventions in different coaching situations (e.g. foster-families, schools)
- Participants can select the most effective coaching tool depending on the individual problem of the client

*Background:* Parents, as well as teachers and mental health professionals face increased levels of helplessness and desperation in the education of children with behavioral or mental disorders (i.e. ADHD or OCD) (Omer, 2010). There is a strong need for an empirically founded coaching approach to support parents and professionals to get out of helplessness and gain self-confidence in dealing with this highly challenging educational setting. The presented Positive Parents Coaching method combines three highly effective positive-psychological approaches. The first approach is the Positive Youth Development (PYD). PYD refers to a widely investigated program to provide opportunities for adolescents to enhance their interests, skills, and abilities (Benson et al., 2006; Lerner et al., 2005; Lerner et al., 2011). It includes the so called 5 Cs of PYD (Competence, Confidence, Connection, Character and Caring) and the "Big Three": Positive relationships, skill-building activities, and youth participation (Lerner, 2004). Secondly there is the PERMA model (Seligman, 2011) which postulates five important factors which contribute independently to human well-being. This theory is the framework from which highly effective positive interventions to promote well-being of young people can be derived (Bolier et al., 2013). Thirdly, the New Authority (Omer, 2000; 2004; Omer & Streit, 2016) is a systemic approach, based on the non-violent-resistance principals. It empowers both parents and educators, who had experienced a loss of their (parental) authority and helps them cope with the child's violent and risky behaviors.

*Content:* Following parental coaching interventions/strategies will be discussed including a practical demonstration:

- Establishing the five Cs: Interventions to foster passion and responsibility and to strengthen positive connections
- -3 Blessings, Discovering and Using Strengths, Gratitude, ACR, Acts of Kindness, Altruism and GRIT in an adapted version for the use in parental coaching
- Parental coaching interventions which increase parental presence, self-control, build a support network and create possibilities for compensation.

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# ORAL PRESENTATIONS

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## An Empirical Investigation of Character Strengths and Well-being in Qatar

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**Keywords:** positive psychology, character strengths, well-being, culture

*Background:* The Values In Action-Inventory of Strengths (VIA-IS) has been proven to be cross-culturally valid, suggesting a universal aspect of human nature [1]. Studies examining character strengths and well-being based on the VIA Inventory of Strengths are non-existent in the Middle East. This was the first study in Qatar and the Middle East to investigate character strengths and well-being.

*Aim:* The study aimed to validate of the Qatari-Arabic version of the VIA-IS using a community sample, assess how the revealed Qatari character strengths correlated with indices of well-being, and examine whether the underlying character strengths varied according to gender and age.

*Method:* The sample consisted of 1336 participants from Qatar University. The instruments used in this study were: The VIA-IS 120, the Satisfaction with Life Scale (SWLS), and the Positive and Negative Affect Schedule (PANAS). The data relating to character strengths were subjected to factor analysis. Studies relying on exploratory factor analysis (EFA) have consistently identified 3–5 factors. A series of confirmatory factor analysis (CFA) were conducted to provide a fit of the hypothesized structure to the observed data. Finally, a multivariate analysis of variance was used to assess the relationships of gender and age to the character strengths that had emerged from the factor analysis.

*Results:* EFA was run for the VIA-IS scales. A four-component solution accounted for 56% of the variance (table 1). The 4 factors were labeled wisdom and knowledge, humanity and justice, embracing life, and emotional strengths. CFA revealed that a 4-Factor Model was the best fit, supporting the initial EFA (table 2). To evaluate the convergent validity of the Qatari-Arabic version of the VIA-IS, correlates were examined with different indicators of subjective well-being. Table 3 displays the correlations of the VIA-IS's subscales with life satisfaction as measured by SWLS and PANAS. One-way MANOVA tested the effects of gender and age on the 24 character strengths. Table 4 indicates a significant effect of age found on love of learning, perspective, prudence, and spirituality. A main effect for the gender was noted on bravery, love, forgiveness, appreciation of beauty and excellence, and spirituality. Post-hoc tests showed that older cohorts were significantly different on the spirituality and the prudence strengths from their younger counterparts. There were no significant differences between all age groups on the love of learning and perspective strengths. Women scored higher than men on love, forgiveness, appreciation of beauty and excellence, and spirituality. Men scored higher on bravery (table 5).

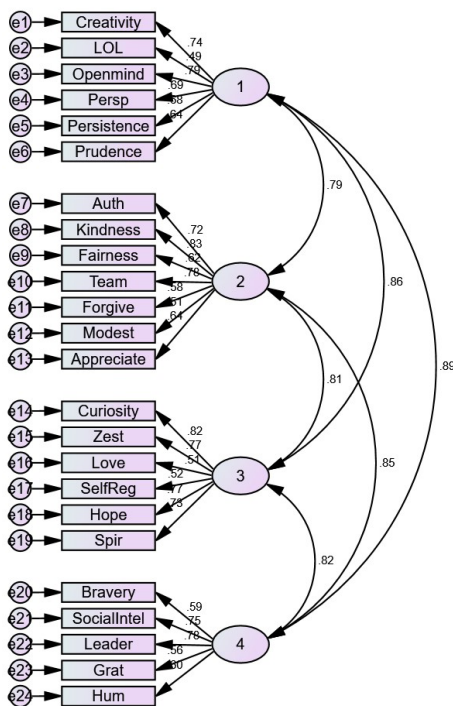
*Conclusions:* The Qatari-Arabic version of the VIA-IS demonstrated to be a valid instrument to assess the character strengths as proposed by the VIA classification. While there are similarities in character strengths across various cultures, each cultural setting is unique in terms of the nature of dimensionality under which certain character strengths are grouped. The significant correlations found with the life satisfaction and positive and negative affect constructs were essentially the same as those attained in past studies. Although there were gender differences in character strengths scores, findings seem to support the fact there are more similarities than differences in the occurrence of strengths among women and men.

**Table 1.** 4-Factor Solution

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.541	39.756	39.756	9.541	39.756	39.756	3.495	14.563	14.563
2	1.508	6.283	46.038	1.508	6.283	46.038	3.451	14.379	28.942
3	1.286	5.357	51.395	1.286	5.357	51.395	3.294	13.726	42.668
4	1.137	4.739	56.135	1.137	4.739	56.135	3.232	13.467	56.135

Extraction Method: Principal Component Analysis.

**Table 2.** CFA 4 Factor Model





**Table 3.** Correlations of the VIA-IS subscales with SWLS and PANAS

<i>VIA-IS Subscales</i>	<i>SWLS</i>	<i>PA</i>	<i>NA</i>
<i>Creativity</i>	.15**	.43**	-.09**
<i>Curiosity</i>	.30**	.47**	-.17**
<i>Love of learning</i>	.14**	.27**	-.08**
<i>Open-mindedness</i>	.12**	.33**	-.04
<i>Perspective</i>	.15**	.34**	-.13**
<i>Authenticity</i>	.15**	.31**	-.14**
<i>Bravery</i>	.09**	.30**	-.08**
<i>Persistence</i>	.24**	.41**	-.15**
<i>Zest</i>	.30**	.49**	-.20**
<i>Kindness</i>	.14**	.27**	-.09**
<i>Love</i>	.22**	.24**	-.14**
<i>Social intelligence</i>	.12**	.34**	-.08**
<i>Fairness</i>	.09**	.18**	-.11**
<i>Leadership</i>	.13**	.36**	-.09**
<i>Teamwork</i>	.13**	.28**	-.08**
<i>Forgiveness</i>	.12**	.15**	-.14**
<i>Modesty</i>	.07*	.15**	-.03
<i>Prudence</i>	.17**	.33**	-.14**
<i>Self-regulation</i>	.21**	.35**	-.18**
<i>Appreciation of beauty and excellence</i>	.07**	.25**	-.00
<i>Gratitude</i>	.23**	.26**	-.15**
<i>Hope</i>	.34**	.43**	-.26**
<i>Humor</i>	.06*	.21**	-.02
<i>Spirituality</i>	.23**	.34**	-.16**

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

**Table 4.** One-Way MANOVA: Gender and Age

Source	Dependent Variable	df	F	Sig.
Between Subjects				
Age	Love of learning	8	2.200	.026*
	Perspective	8	2.234	.023*
	Prudence	8	2.116	.032*
	Spirituality	8	2.864	.004*
Gender	Bravery	1	6.929	.009*
	Love	1	5.705	.017*
	Forgiveness	1	6.436	.011*
	Appreciation of beauty and excellence	1	5.687	.017*
	Spirituality	1	7.042	.008*

\*  $p < .05$

**Table 5.** Gender differences on character strengths

<i>VIA-IS Subscales</i>	<i>Mean Females</i>	<i>SD</i>	<i>Mean Males</i>	<i>SD</i>	<i>F values of mean differences</i>
Bravery	3.69	0.76	3.86	0.63	0.255*
Love	3.98	0.75	3.82	0.73	1.240*
Forgiveness	3.95	0.69	3.48	0.68	2.121*
Appreciation of beauty and excellence	4.02	0.56	3.78	0.68	1.600*
Spirituality	4.08	0.52	3.96	0.63	11.901*

\*  $p < .05$

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## Co-Designing a Positive Psychology Training Programme for Direct Care Workers in Nursing Homes: An Evidence-based Approach

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**Keywords:** well-being, personnel, eldercare, ageing, intervention

*Background:* According to the OECD, the number of people over the age of 80 will have doubled between 2013 and 2050 [1]. Nursing homes are increasingly necessary, yet remain challenging environments where people are faced with illness and death. For residents, it is often their last home, one without their family and where they may feel institutionalised.

For direct care workers, the staff who work closely with the nursing home residents on a day-to-day basis, the job they do is demanding both emotionally and physically, and staff burnout and turnover is high [2]; in turn, this affects the quality of resident care and performance [3].

Research suggests that happiness is under people's control [4] and that engaging in positive intentional activities can make people significantly happier [5].

*Aim:* This project was creatively designed to investigate the best possible structure for a Positive Psychology Intervention programme whose objective is to provide the direct care workers in nursing homes with skills, knowledge and practices that enable them to increase their own wellbeing, and potentially support that of the residents they care for. Existing literature highlights several difficulties in the design of such programmes, most of which are relevant to everyday life in nursing home environments. This study is based on the assumption that the best design for such a training programme is one that is informed not only by past research, but also by the experience and cooperation of the direct care workers and the nursing home management.

*Method:* Using past research, design and validated interventions, a well-being training programme was created in order to integrate positive psychology interventions into direct care workers' day-to-day activities and build upon their experience and knowledge of what does, or does not, impact their well-being. Equally important in designing the programme was the will to take as many of the stakeholders into account as possible, including the residents, nursing home management and Group management, to find synergies in their needs and to root the programme within them. For these reasons, a co-design iterative process was engaged in.

*Results:* The outcome of this study was a full and detailed, evidence-based, well-being training programme, whose design was informed by the needs, the environment and the day-to-day activities of the audience it is designed for, in the hope of imbedding the positive practices it initiates into their everyday life, thus aiming for a higher uptake and rendering them and their effect longer-lasting

*Conclusions:* The presentation in Budapest would focus on presenting this original design process with some examples of innovative ways to adapt tested positive psychology interven-

tions that were integrated into the resulting professional-development programme. While we are aware this is not standard research, it is nevertheless an important study phase to ensure that practical applications of positive psychology interventions meet the highest standards.

### Acknowledgments

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## A Pilot Study of Loving-Kindness Meditation for Japanese Nursing Students

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**Keywords:** Loving-Kindness Meditation, nursing, mindfulness, self-compassion, compassion

*Background:* It is necessary for nurses to have compassion as they carry out the tasks involved in caring for people. However, compassion fatigue is a problem for nurses. In order to prevent compassion fatigue and burnout, it is important for nurses to cultivate compassion for themselves [1]. Intervention at an early stage, before they become occupational nurses, may be necessary. Therefore, we investigated an intervention to cultivate compassion among nursing students.

*Aim:* The aim of this study was to cultivate self-compassion and reduce stress responses among nursing students through loving-kindness meditation (LKM) practice.

*Method:* This pilot study was conducted during the summer of 2017. Twenty-two nursing students (all female) were recruited through email. All participants gave informed consent. We examined the psychological and physical effects of practicing LKM before and after intervention. Self-compassion was measured using the Japanese version of the Self-Compassion Scale (SCS-J) [2] before and after intervention. To measure the depression-controlling effects of the LKM intervention, we used k6-J [3]. Heart rate, respiration, amylase and cortisol rate were recorded to assess physical stress responses before and after each session. There were three sessions, each lasting 2 hours. The protocol of the sessions was designed with reference to Hofmann et al.'s study [4]. Three students dropped out and the remaining 19 students completed all the post-intervention assessments. Since some data were missing, we conducted ANCOVA for each indicator.

*Results:* First, ANCOVA (depressive symptoms as the covariate) was conducted for SCS-J scores before and after intervention. A main effect of session was found ( $F(1, 17)=11.64$ ,  $p<.01$ ), and self-compassion was significantly increased with LKM. Next, ANCOVA (session [first, second, third] × practice [before, after]; depressive symptoms as the covariate) was conducted for physical stress responses. No significant interactions were found. However, some main effects were found, so we conducted multiple comparisons. Cortisol decreased with LKM practice ( $p<.05$ ), and amylase in the second and third sessions was lower than in the first session ( $p<.05$ ). Thus, participating in three LKM sessions decreased physical stress responses.

*Conclusions:* LKM intervention increased self-compassion and decreased physical stress responses among nursing students. Although it was a short-term intervention, it can still be considered effective. It is meaningful to show the both the psychological and physical effects of LKM. Self-compassion prevents not only compassion fatigue, but also improves compassionate care behavior [5]. Such intervention for nursing students will not only prevent compassion fatigue and burnout, but also lead to a more professional nursing workforce.

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## Are Coping Strategies Related to Acceptance of Disability Among Mobility Impaired Individuals?

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**Keywords:** coping strategies, acceptance of disability, mobility impairment

*Background:* Many studies have suggested a relationship between coping strategies used to deal with stressors and levels of psychological well-being, but it has not yet been established whether coping strategies are related to acceptance of disability among people who have mobility impairment. This study aimed to investigate the importance of coping strategies on acceptance of disability for mobility impaired individuals.

*Method:* The study sample consisted 223 mobility impaired individuals (81 men and 142 women), aged between 18 and 66. Their coping strategies were assessed using Brief-COPE questionnaire [1] measuring 14 different coping strategies. All the strategies were grouped into three groups: 1) adaptive problem-focused strategies 2) adaptive emotion-focused strategies, 3) maladaptive coping strategies. The acceptance of disability was measured using Acceptance of Disability scale – Revised [2].

*Results:* Men and women tend to use different strategies of coping. Men reported using active coping, substance use and humor as coping strategies more often than women. Meanwhile, women reported using venting, religion and use of emotional and instrumental support as coping strategies more often compared to men. The results revealed that individuals who use adaptive problem-focused and adaptive emotion-focused coping strategies more often reported having higher acceptance of disability and its components compared to individuals who use these adaptive strategies less often, regardless of gender. On the other hand, male and female respondents who use maladaptive coping strategies more often reported having lower acceptance of disability and its components than respondents who use these strategies less often. Linear regression analysis identified denial, substance use, behavioral disengagement, positive reframing and self-blame as main significant predictors of acceptance of disability ( $R^2=.502$ ,  $p<.001$ ).

*Conclusions:* Even though men and women cope with stress in different ways, using adaptive coping strategies more often and avoiding using maladaptive coping strategies predict a higher acceptance of disability. While the results help to identify specific coping strategies associated with better adjustment, they also highlight the need to encourage mobility impaired individuals to use adaptive coping while dealing with their disability-related issues.

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## Community Resilience in Contexts of Collective Disadvantage: Convergent and Divergent Validity

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**Keywords:** community resilience, emotional regulation, social capital, collective efficacy, subjective well-being

*Background:* This work attempts to advance conceptual definitions of Community Resilience (CR) and to offer an instrument, which could adequately evaluate it in different contexts of collective disadvantage, like natural and social disasters, poverty and collective violence. The CR has been defined as the ability of a community to detect and prevent adversities, to absorb shocking adversity and to recover from damage (Twigg, 2007<sup>[1]</sup>).

*Aim:* the main objective is to analyze the content and construct validity of the CR scale and examine its convergent and divergent validity

*Method:* First, we developed a 51-item version of the Community Resilience scale. The scale was composed of 23 attributes grouped in the 3 dimensions (Emotional regulation, Social wellbeing and Social capital and Collective efficacy). The instrument was submitted to the review of 5 expert judges through the procedure of the V of Aiken (1980<sup>[2]</sup>). Next, we administrated both the full 51-item version and a reduced 12-item version in 3 convenience samples from 2 countries (Argentina  $N1 = 480$  and  $N2 = 957$  and Chile  $N3 = 196$ ), 60% women, and age range 15-84,  $M = 26.47$ ,  $SD = 18.98$ ).

*Results:* The Kalpha index according to expert judges for the grouping of the attributes was  $K = .866$ , 95% CI [.6878, 1.00]  $p < .05$  (2 judges, 23 pairs of observations). Items on the scale reported indexes  $V > .70$  (range 0.70 - 0.95). In addition, we performed a Confirmatory Factor Analysis with the 12-item version and a satisfactory fit to the data was obtained ( $\chi^2(51) = 265.389$ ,  $p < .001$ , CFI = .932, TLI = .912, SRMR = .041). Accordingly, the results indicated adequate reliability indices for both versions and in all the 3 samples ( $\alpha > .70$ ). Regarding convergent and divergent validity, we found positive and significant correlations with Communal Mastery, Subjective Well-being, Social Well-being and Positive Socio-Emotional Climate, and lack of association with Negative Climate.

*Conclusions:* The results support the existence of three dimensions of the CR scale: Emotional regulation, Social wellbeing and Social capital and Collective efficacy in two versions of the scale (51 and 12 items) and its internal consistency. Likewise, the analysis confirmed its convergent and divergent validity. This research attempted to identify the ways to promote community resilience with the purpose of empowering communities and generate sustainable social change.



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## Development and Validation of Authentic Workplace Happiness Questionnaire (AWHQ)

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**Keywords:** authentic happiness, workplace, scale validation

*Background:* Authentic Happiness Theory proposes that happiness can be analyzed into three different elements: positive emotion, engagement, and meaning; and thus life can be happy life, engaged life and meaningful life. It also postulates that each of these elements is better defined and more measurable than happiness in general[1].

*Aim:* The purpose of the study was to apply and extend the authentic happiness theory to work setup. Main aim was to develop and validate a questionnaire to measure authentic happiness in workplace settings.

*Method:* Items were generated on the basis of i) authentic happiness theory and definitions of three facets of happiness, ii) already developed questionnaires measuring different elements of workplace happiness or happiness in general and iii) interviews and focus groups with employees. Items were pilot tested, revised and then final version was administered to a sample of 756 employees, both males and females (Mean Age=37.45, Mean education=14.5 years) from different occupations such as teachers, administrative managers, sales person etc. for validation. Alongwith newly developed AWHQ, the participants were administered already developed scales of workplace happiness and its facets and self-reported and supervisor rated performance. Descriptive and psychometric analyses, validation and factor analysis were conducted.

*Results:* The newly developed AWHQ showed promising psychometric and validity statistics. Parallel analysis and factor analysis supported three subscale structure of the scale and the scales were named as pleasant worklife, engaged worklife and meaningful worklife. Alpha reliabilities of the subscales and overall scale ranged from .89 to .93. Scores on AWHQ were positively related with workplace happiness, work engagement and job satisfaction scales. Furthermore, correlations with both self and supervisor rated performance were positive albeit correlation with self-rated performance was stronger. Hierarchical regression analyses indicated incremental validity of AWHQ above the traditional workplace happiness scale.

*Conclusions:* The newly developed AWPB proved to be a valid and reliable measure of workplace happiness. The new measure also proved superior to the traditional measure of workplace happiness.

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## ***The Lullaby Project: Refugee Mothers and Orchestral Musicians Mutually Enhancing Well-being***

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**Keywords:** music psychology, wellbeing, The Lullaby Project, refugees

*Background:* *The Lullaby Project* pairs mothers with professional musicians, to build a lullaby for their child, with the intent to promote wellbeing. It is a 3-session workshop culminating in a final performance and CD recording, developed by Carnegie Hall's team in NYC, rapidly expanding across the US and internationally. Music engagement has for long been associated with wellbeing, in particular with vulnerable populations. A United Nations recent report has presented strong evidence on the promise of artistic engagement for the particular case of refugees [1]. Simultaneously, the music profession has been associated with psychological vulnerability and challenges to wellbeing [2]. Through bringing together refugees and musicians from the Royal Philharmonic Orchestra (RPO) in London, we intended to assess the impact of *The Lullaby Project* for both groups and ascertain its potential for wellbeing promotion. Wellbeing, for the purposes of the study, was defined following Keyes's proposal (integrating Emotional, Psychological and Social Wellbeing) [3].

*Aim:* Assess how participants experienced the first pilot of *The Lullaby Project* in the UK, with a specific interest in the evaluating the impact of the project on elements of wellbeing (*areas of change*) and the underlying processes the project model enables (*mechanisms of impact*).

*Method:* 8 mothers from Praxis Community Projects (an East-London charity for refugee support) took part, along with 8 musicians from the RPO. The mothers came from countries such as Bangladesh, Ethiopia, Eritrea, Ivory Coast and Nigeria. Of the 8 musicians, 4 were men and 4 women, all British citizens. Ages ranged from 22 to 61 years. Methods included semi-structured interviews with all participants, diary-notes and non-participant observation. Interpretative Phenomenological Analysis was chosen as the analysis framework, given its commitment to idiography, prioritizing the understanding on how the participant, in context, constructs meaning and makes sense of a phenomenon. [4]

*Results:* The mothers' reports accounted for 3 overarching themes regarding areas of change (Wellbeing, Proactivity and Reflection) and 8 sub-themes that were further interpreted in the light of Keyes's proposal. Purpose, Autonomy, Social Integration and Social Contribution stood out as the strongest wellbeing components experienced. Musicians reported change across 3 overarching areas (Skills, Wellbeing and Reflection), encapsulating 10 sub-themes. Within wellbeing, Purpose, Personal Growth and Social Contribution were the strongest threads. There was high convergence in mechanisms of impact for both groups. The project as: (1) motivating, offering the right level of challenge to all, towards a highly valued goal; (2) connection at a very human level, placing centrality on individuality and

shared creative construction, rather than a top-down “fixing” interventional agenda and (3) guided by a strong output, that besides promoting a sense of ownership, is long-lasting.

*Conclusions: The Lullaby Project* model proved strongly effective for wellbeing promotion. The rather unexpected encounter of two highly diverse groups such as refugee mothers and elite orchestral players, around a common creative goal, represented a highly fruitful endeavor with meaningful impact on the wellbeing of both groups and, crucially, meeting their specific idiosyncratic needs alike.

### **Acknowledgments**

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## Factors Related with Psychological Distress and Posttraumatic Growth in Women with Breast Cancer: Core Beliefs, Rumination and Type C Personality

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**Keywords:** posttraumatic growth, psychological distress, core beliefs, rumination, type C personality

*Background:* Breast cancer is the most common cancer type in the world. Psychological distress such as depression, anxiety, and stress can be seen in patients after receiving breast cancer. However not only psychological distress but also positive changes named as post-traumatic growth (PTG) could be seen in patients after experiencing a traumatic event. PTG could be defined as positive psychological improvements in various fields of life after coming up with stressful and challenging life events that are needed to struggle. After the diagnosis of cancer, patients are more likely reexamine their core beliefs and this process may lead to the occurrence of psychological distress, PTG or both of them. Reexamine of core beliefs causes the person to ruminate the traumatic event as deliberately or intrusively. In this study, it was hypothesized that those who ruminate intrusively will experience psychological distress, those who ruminate deliberately will experience PTG. Type C personality is also an important variable in psychological distress. Having Type C personality can make people more vulnerable to experience psychological distress. But the relationship between Type C personality and PTG wasn't known, therefore, this relationship examined firstly in the current study.

*Aim:* The current study aimed to extend the previous work by investigating the relationships between core beliefs, event related rumination, Type C personality, psychological distress and PTG in breast cancer survivors within the scope of Calhoun, Tedeschi, and Cann's (2013) PTG model.

*Method:* The sample consisted of 201 female patients (Mean of Age= 47.81, SD= ) from Ege University Hospital in İzmir-Turkey. The participants completed Socio-Demographic Information Form, Core Beliefs Inventory, Event Related Rumination Inventory, Type C Questionnaire, Depression Anxiety Stress Scale (DASS 21), and Posttraumatic Growth Inventory. To investigate the hypotheses path analysis was conducted.

*Results:* After investigation of Pearson correlation analysis, the relationship between core beliefs challenge, psychological distress, and PTG was examined with path analysis. The criterion of developed model fit was met ( $\chi^2 = 1.013$ , Sd= 2,  $\chi^2/sd = .506$ , GFI= .998, AGFI= .985, CFI= 1.00, RMSEA= .000). It has been determined that core belief challenge has a direct effect on depression ( $\beta = .32$ ,  $p < .001$ ), anxiety ( $\beta = .33$ ,  $p < .001$ ), stress ( $\beta = .31$ ,  $p < .001$ ), and PTG ( $\beta = .44$ ,  $p < .001$ ). Then deliberate and intrusive rumination were also included the path analysis. The criterion of developed model fit was met ( $\chi^2 = 3.49$ , Sd= 6,  $\chi^2/sd = .58$ , GFI= .99, AGFI= .98, CFI= 1.00, RMSEA= .00). It has been determined that core belief challenge

has a direct effect ( $\beta = .21, p < .01$ ) and indirect effect through intrusive rumination ( $\beta = .21, p < .01$ ) on depression, has a direct effect ( $\beta = .20, p < .01$ ) and indirect effect through intrusive rumination ( $\beta = .26, p < .001$ ) on anxiety, has a direct effect ( $\beta = .19, p < .05$ ) and indirect effect through intrusive rumination ( $\beta = .24, p < .01$ ) on stress, and has a direct effect ( $\beta = .21, p < .05$ ) and indirect effect through deliberate rumination ( $\beta = .34, p < .001$ ) on PTG. Core belief challenge and intrusive rumination explained 13% of depression, 16% of anxiety, 14% of stress, and 26% of PTG together.

Secondly, the relationship between Type C personality, psychological distress, and PTG was examined with path analysis. The criterion of developed model fit was met ( $\chi^2 = 2.31, Sd = 1, \chi^2/Sd = 2.31, GFI = .995, AGFI = .931, CFI = .996, RMSEA = .08$ ). It has been determined that Type C personality has a direct effect on depression ( $\beta = .30, p < .01$ ), anxiety ( $\beta = .27, p < .01$ ), and stress ( $\beta = .33, p < .001$ ). There were no relationship between Type C personality and PTG.

*Conclusions:* Results of association between challenges to core beliefs, rumination, psychological distress, and PTG are consistent with the literature findings. After a traumatic experience, people might question their core beliefs so that people could organize new ideas and life history as a result of cognitive efforts and these could lead to experience of PTG. But as seen, one side of the challenges to core beliefs can go to the PTG, one side of it can go to psychological distress and rumination style is an important variable in this process.

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## **Micro Job Crafting: How Job Crafting for 12 Minutes or Less a Day Contributes to Sustainable Positive Behaviour Change**

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**Keywords:** job crafting, well-being, habits, behaviour design, performance

*Background:* Job crafting is an intentional work-based activity undertaken by an employee to redesign and shape elements of their job [1]. Making proactive behaviour change is challenging with a number of factors influencing its success and sustainability, including the size and nature of the change being undertaken [2].

Inserting micro habits into daily activities have been found to be an easy and small way to establish lasting behaviour change. [3]. To date, there has been no known research into deliberately encouraging employees to undertake micro job crafting in order to make more sustainable change to their work. More broadly, there is limited research on the precise time-allocations for job crafting behaviors, and thus its relation with employee workload is under-examined.

*Aim:* A qualitative analysis of the make-up of job crafting examples collected as part of a job crafting intervention, we explore the motivations to craft, the time investment associated with various job crafting behaviors, and possible impact on workload based-on the type of job crafting undertaken. Capturing this contextual data provides insight into the mechanics of job crafting within organisations.

*Method:* Focus groups (n = 12) were conducted as part of a job crafting intervention undertaken at a large Australian University. Participants recorded further examples of job crafting they had undertaken in a post-experimental questionnaire. The examples were coded for time investment, workload impact, job crafting type and motivation.

*Results:* 32 distinct examples of job crafting were collected. Overall, there was diversity in the design and delivery of job crafting activities implemented amongst participants, yet a clear trend in the data was that the majority (n=24, 77 %) of job crafting undertaken was relatively small in terms of the time cost, involving less than 12 minutes a day or approximately one hour a week.

*Conclusions:* Our results suggest that encouraging employees to engage in job crafting is unlikely to involve a substantial time-investment from the individual employee, and thus may increase the appeal of engaging in job crafting. This conclusion is further supported by research showing that individuals show greater motivation when their attention is focussed on small, achievable goals [3]. From this, the new concept of “micro job crafting” will be introduced and the implications for researchers, leaders and managers will be discussed.

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## Character Strengths Predict Academic and Military Performance

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**Keywords:** character strengths, performance, intelligence, personality

*Background:* What personal characteristics predict how well army cadets succeed during their Bachelor's degree program – both academically and in extremely challenging situations? Reviews of factors predicting job and academic performance suggest general mental ability (GMA) as the best performance predictor, both in civilian and military settings, followed by personality traits. Recently, however, research indicates that character strengths may be an important predictor of performance in general, and especially in military settings. Building on Peterson and Seligman's (2004) classification of character strengths, previous studies have suggested twelve character strengths as particularly important for succeeding as a military officer, and, hence, to be further developed in the army cadets during their Bachelor's degree program: Leadership, Integrity, Persistence, Bravery, Teamwork, Fairness, Open-mindedness, Social intelligence, Love of learning, Perspective, Self-regulation, and Creativity.

*Aim:* The purpose of this study is to examine to what extent the twelve character strengths predict army cadets' academic (average grades) and military (Combat Course Evaluation and Suitability as Military Leader) performance, when controlling for GMA and personality.

*Method:* The sample consisted of 110 army cadets from two different student cohorts. GMA and personality ("Big Five" personality traits) were measured prior to the cadets' attendance at the Norwegian Military Academy (NMA), character strengths and Combat Course Evaluations (CCE) were measured 22 months into the program, while academic grades and Suitability as Military Leader (SML) were measured when the cadets finished their three-year Bachelor's degree program. We calculated partial correlations between character strengths and the three performance measures, controlling for GMA and all five personality factors.

*Results:* Ten out of twelve character strengths correlated significantly with all three performance measures, after controlling for GMA and personality (partial correlations ranging from .36 to .60). Social intelligence correlated significantly with two performance measures, while Fairness did not correlate significantly with any of them.

*Conclusions:* This study indicates that character strengths can be important predictors of how well military cadets succeed during their Bachelor's degree program – both when it comes to academic and military performance, and that character strengths may outperform GMA and personality as performance predictors.

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## **“I Kept on Thinking about What I Can Do To Help...”: Moral Exemplars’ Contemplative Mind and Wisdom**

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**Keywords:** wisdom, contemplation, qualitative, Korean, moral exemplars

*Background:* Walsh [1] has argued that a contemplative mind should both include not only ones’ cognitive intentions, but also ones’ behavioral intentions to help others and communities. Confucian’s perspective on contemplation covers the later, thus, we focus on the Confucian notion of contemplation [2]. At the same time, several wisdom researchers including the first author of this piece argue that the reflective dimension of the wisdom might be the most strongly related to wisdom and the strongest predictor of wisdom [3][4]. This is similar to contemplation. At the same time, Eastern philosophy on wisdom has focused more on the reflective dimension such as awareness, enlightenment, mindfulness, and mental discipline to benefit others [5]. Thus, there is a strong overlap between contemplation and wisdom in the Eastern tradition. Therefore, using the Eastern philosophy of contemplation and wisdom and a qualitative data analysis approach, we focus on the participants’ contemplation, reflective thinking, mental discipline to seek wisdom and benefit others, and their moral life.

*Aim:* As part of a larger study, we interviewed moral exemplars who were nominated as moral and wise models by living a virtuous life. They have devoted their life to helping others who are in need. In this piece, we look at their contemplative mind, and highly reflective and devoted mental discipline to live by helping others.

*Method:* Using qualitative approach, eighteen Korean moral exemplars were interviewed. Their ages ranged from 41 to 67, and their religious affiliations were Christianity, Buddhism, and Agonistic. Their jobs included a Buddhist monk, Christian missionaries, social workers, and teachers.

*Results:* The results showed the following themes:

1. No harm, no violence: highest universal morality. This theme captures participants’ intention to help others based on their moral standard. It is considered the highest universal morality [6]. These participants spent a good amount of time in contemplation to purposely choose their actions not to harm others’ feelings, and caring for the people in need. Embracing and comforting others’ pains is an important part of their practices.
2. Contemplation in how and what to help: Putting an effort into thinking and helping others. These participants observe, find, and initiate to provide the help to people who are in need.
3. Fighting for social justice, human rights, and inequality issues: These participants watch others’ abuse of power against people who are disadvantaged and marginalized, and provide strength to help those who are in need.

4. No compromise to what they believe in: This is not an easy thing to do since we are social animals. However, those participants who fell within this category fight for equal social justice and human rights issues restlessly. This relates to Theme 3. At the same time, quite a few people within Theme 4 also fight against social norms, and this at times can be destructive in terms of accepting others.
5. Working for a good cause and not for fame or for showing others what they do: Those participants within Theme 5 believe that helping others is meaningful, valuable, and immeasurable work. They also have seen that many other people who help others for fame, self-pride, or for showing off to others ultimately fail in their endeavors and stop their helping activities. Participants displaying Theme 5 believe that such helpers should be truthful to themselves about what they do.
6. Strong motivation to create their own organization to help others.

*Conclusions:* In conclusion, through their self-reflection and contemplation, most participants developed strong individual morality and an inner self, which might at times mean they have to go against social norms so as to promote human rights and social justice.

### **Acknowledgments**

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## The Contribution of Character Strengths to the Life Satisfaction of Older Adults in Various Living Conditions

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**Keywords:** character strengths, life satisfaction, old age, positive ageing, well-being

*Background:* Population ageing requires an understanding of the factors that facilitate adjustment and enhance optimal functioning and well-being in later life. Recognising and using own strengths might help creating a meaningful and satisfying life after retirement and facilitate adjustment processes. Furthermore, the additional lifetime after retirement offers a unique opportunity to apply strengths in areas of interest for the well-being of oneself and others. However, character strengths and their relationships with well-being in old age remain to a large extent unexplored.

*Aim:* The aims of the study were (1) investigating the relationship of character strengths with life satisfaction in older individuals; and (2) examining the contribution of character strengths to life satisfaction depending on different demographic characteristics and living conditions: We examined differential effects of age, employment status (employed vs. retired), living arrangement (living alone vs. living with a partner), and marital status (widowed vs. being in a partnership).

*Method:* This cross-sectional study comprised 15,598 older individuals (aged 46-93 years) who completed the Values in Action Inventory of Strengths (VIA-IS), the Satisfaction With Life Scale, and measures on demographic characteristics and living conditions.

*Results:* Findings showed a positive association of most character strengths with age, being employed and living together. Only for a few character strengths a relationship with being widowed respectively being in a partnership could be observed. Further results indicate that with advancing age the contribution of character strengths to life satisfaction decreases slightly except for modesty and prudence, which showed increased relevance for life satisfaction. Many character strengths (e.g. curiosity, kindness, teamwork, modesty) seemed to play a more important role in the life satisfaction of retired individuals than employed adults. In addition, findings reveal that the effect of several character strengths (e.g. curiosity, love of learning, bravery, zest) on life satisfaction was more beneficial to older adults living alone than those living with a partner.

*Conclusions:* Character strengths contribute to the life satisfaction of older adults. These relationships also depend on demographics and living conditions and might support adjustment processes in later life. A strengths-based perspective emphasises older adults' capabilities and potentialities and may shed light on ways of enhancing well-being in later life.

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## Assessing strengths within a population of patients suffering from severe psychiatric disorders

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**Keywords:** strengths assessment, recovery, psychiatric patients

*Background:* Standardized strengths tools adapted to the specificities of patients suffering from severe psychiatric disorders are rare and not routinely used in mental health services. Therefore, a new strengths assessment, AERES, has been developed and validated in order to measure patients' internal and external strengths.

*Aim:* Three studies allowed, firstly, to test the feasibility of this new tool within a population of patients suffering from severe psychiatric disorders; secondly, to evaluate the patients' perception regarding this new tool; thirdly, to validate the psychometric properties, to identify psychiatric patients' strengths profiles and to explore the impact of such an evaluation.

*Method:* This new self-assessment scale, AERES, measures 31 strengths classified in three dimensions: personal qualities, passions and environmental or social strengths. This instrument measures three aspects: (i) the presence of each strength, (ii) the degree of contribution of each strength to the patient's recovery, (iii) new strengths patients want to develop. The psychometric properties of the tool have been validated within a clinical population of 213 patients suffering from severe psychiatric disorders. We measured strengths profiles and compared levels of psychosocial outcomes before and after the administration of the AERES to observe whether identification of personal strengths had an impact on patients.

*Results:* Strengths contributing the most to personal recovery were sentimental relationships, friends and professional healthcare. Frequency analyses showed that the most present strengths were listening to music, gratitude and professional healthcare. The strengths patients wanted to develop the most were self-esteem, travelling and friends. T-tests indicated an increase in self-esteem, happiness, serenity, satisfaction and meaning in life after the strengths assessment. This new tool can easily be administered and is beneficial to patients and health professionals.

*Conclusions:* This is one of the first studies assessing strengths and positive functioning of patients suffering from severe psychiatric disorders. Assessing strengths within this vulnerable population can provide clinicians with a powerful tool to understand patients' intact repertoires, which can be used to treat psychopathology or to alleviate symptoms. As such, thirty mental healthcare centers in Switzerland and France decided to use this new instrument as a routine clinical assessment.

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## Personal Strengths Development as the “learning to be” Competence in a University Foreign Language Class

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**Keywords:** personal strengths, learning to be, higher education, foreign language teaching

*Background:* In the frame of an on-going doctoral project, we’ve applied the strengths classification and the positive approach to educational interventions to teaching the “learning to be” life competence in a foreign language class. Although this competence is part of the educational model for the XXI century since the end of last century [1] and is a learning objective in any foreign class since early this century [2], there seems to be no clear theoretical or didactical framework for its teaching and evaluation. Not only do the official documents remain abstract on this topic, but some of the research reviewed does not offer more clarity either. For example, Barahona, Sánchez y Urchaga [3] define the “learning to be” as an “attitudinal personality dimension” (p. 247) to just a few lines later redefine it as the “personal and social competencies such as the disposition to be present, think critically and autonomously and possess cooperative and collaborative skills” (*ibidem*). While the thinking is rather part of the “learning to know”, and the cooperation belongs to the “learning to live together”, the resting “presence” is hardly a competence at all. A clarification on the subject is necessary.

*Aim:* The purpose of this on-going research has been to evaluate the perception and effect of a positive intervention based on strengths coaching as the “learning to be” in a language class.

*Method:* Our *context* was a rural Technological University in Mexico. The *participants* were 20 second year students enrolled in the MEXPROTEC scholarship programme, allowing them to compete for one of 200 full year scholarships in France. The French B1 preparation class was the scenario of 6 training sessions on personal strengths (as defined by Peterson & Seligman [4]). In a mixed *design*, a series of interviews and tests was applied prior and after the intervention, and the selection results were included in the analysis.

*Results:* The approximation to the first results (available in full by the time of this conference) shows that the intervention was very well received by the participants and effective.

*Conclusions:* We argue that the personal strengths framework is highly suitable for the “learning to be” competence development, as it helps to clearly distinguish the “learning to be” from other “learnings”, it’s friendly, highly personalizable and is of high value for life, just as intended by the international organisms proclaiming this competence as an educational pillar.



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## **Satisfaction with Life of Parents of Preschooler Children: The contribution of Parent's Personality Variables, Child's Temperament and Quality of Marital Relationship**

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**Keywords:** positive psychology, life satisfaction, parenthood, preschool children

*Background:* Parenthood of preschoolers is characterized by changes in various areas of life. The ability to cope with these changes is largely dependent on personal characteristics, personality and environmental factors pertaining to the parents and their children [1]. Empirical findings indicate that these changes may lead to high levels of stress which impair parental functioning [3]. However, only a few studies to date have examined the variables that may improve the positive outcomes such as satisfaction of these parents' lives. In addition, researches of parental behavior and satisfaction have focused mainly on the role of motherhood [4].

*Aim:* In the light of the positive psychology approach, the aim of the current study was to examine the unique and combined contribution of parent's personality variables: anxiety and avoidant attachment and self-awareness (rumination and reflection), perception of child's temperament (emotional, active, sociable and shy) and satisfaction with marital relationship, to parent's satisfaction with life as well as whether fathers and mothers differ in these variables.

*Method:* The study was conducted among 147 fathers and 147 mothers (n = 294) of preschool children (0-7). After they gave their consent to participate in the study the participants completed structured questionnaires that included the following variables: life satisfaction, attachment orientation, self-awareness, child's temperament, satisfaction of marital relationship and socio-demographic variables

*Results:* The findings indicated that mothers compared to fathers were characterized by less avoidant attachment, and more rumination and reflection. It was also found that younger age, higher education and better economic status are related to more satisfaction with life. Avoidant attachment and rumination were linked to less satisfaction with life, as were emotional and shy child temperaments. Better marital satisfaction was associated with greater life satisfaction. No differences were found between fathers and mothers at the level of satisfaction with life.

*Conclusions:* The importance of the study is that it lays out a map of variables that may contribute to raise life satisfaction among parents of preschoolers. Given the fact that the early years of parental care serve as the basis for the child's emotional and physical development, the findings of this research may help professionals who work with parents of young children to build empirically based interventions for these parents to increase their satisfaction with their lives and at the same time reduce the stress they experience in their parenting.

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## The Vocational Career of Adolescents with Below Average IQ: Who Beat the Odds?

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**Keywords:** IQ, life-span development, vocational career

*Background:* It is well known that adolescents with low IQ usually have an unsuccessful vocational career. However, some beat the odds. There is a lack of knowledge of how common that is and of the factors associated with a successful vocational career for adolescents with low IQ.

*Aims:* Two research questions were addressed: 1. How common is it that adolescents with below average IQ have a successful vocational career? 2. Which personal characteristics (especially other competence factors than IQ) are associated with a successful career for those with below average IQ?

*Method:* Data were used from the Swedish longitudinal program Individual Development and Adaptation (IDA) in which 1326 adolescents were followed from childhood to midlife. The genders were studied separately or gender was controlled for in the analyses. The importance of IQ, school achievement, educational aspirations, task persistence, parents' SES, and gender for the vocational career was studied using multiple regression analysis and methods for categorical analysis. The emphasis was on identifying compensatory factors "explaining" why some with below average IQ beat the odds and had a successful vocational career.

*Results:* Very few women in the studied cohort (born 1955) had by midlife achieved a very high vocational level (2%) or a very high income (0%). In contrast, a surprisingly high proportion of men with a very successful vocational career had below average IQ. These men constituted 19% of those belonging to the top 10% in income and 25% of those belonging to the most qualified vocational level category. By far the most important predictor of vocational level or income for those with below average IQ was the adolescents' educational aspirations, not school achievement or the parents' SES. In MRAs with the competence factors as independent variables and including gender and parents' SES as control variables, educational aspirations emerged as the only significant predictor of vocational success. The highly successful low IQ men had means below the average in all competence factors except educational aspirations for which the means were above the average.

*Conclusions:* For men, educational aspirations emerged as the main explanatory factor of a successful vocational development for adolescents with below average IQ. The other studied factors were found to be of less or no importance. This is somewhat surprising considering the well-known associations between these factors and vocational outcomes often reported in the literature. Extremely few females in the studied cohort had a very successful career.

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## The Role of Health Attitudes and Future Orientation in the Sport Commitment Model

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**Keywords:** sport commitment, health attitude, future orientation, path analysis

*Background:* Sports motivation seems to be a key factor in maintaining sports activity among youth. According to the Sport Commitment Model, enjoyment, opportunities and investments are the most important sources to participating in sports [1]. Understanding psychological and health influences behind sport participation has been a goal of many studies [2]. Previous studies reported that health attitudes may have an impact on sports motivation [3]. In addition, future goals and plans are also related to sports motivation [4].

*Aim:* Accordance with the literature the purpose of this study was to test an expanded model of sport commitment including health attitudes and future orientation to the original model.

*Method:* Participants were 526 adolescent athletes ranging in age from 14 to 18 years ( $M=16.41$ ;  $SD=1.16$ ). Sport Commitment Questionnaire-2 was used to measure commitment types (Enthusiastic, Constrained) and commitment determinants (Sport Enjoyment, Other Priorities, Valuable Opportunities, Social Constraints, Personal Investment-Quantity, Personal Investment-Loss, Social Support-Emotional, Social Support-Informal, Desire to Excel-Mastery, Desire to Excel-Social). Future orientation was evaluated with the Consideration of Future Consequences Scale. The Health Attitudes Scale was measured with questions related to appearance, physical and psychological condition. Besides descriptive statistics, path analysis was used to test the expanded model of commitment.

*Results:* The result of the path analysis showed us a good fit ( $X^2=79$ ,  $p<.00$ ;  $NNFI=.94$ ;  $CFI=.98$ ;  $SRMR=.03$ ;  $RMSEA=.06$ ) to our data. The sources accounted for 76% of the variance in Enthusiastic Commitment. Sport Enjoyment, Valuable Opportunities, Personal Investment (Loss, Quantity), Social Support (informal), Desire to excel (Mastery) strengthened, Other Priority and Social Support weakened Enthusiastic Commitment. For Constrained Commitment, the sources explained 40% of the variance. Other Priorities, Personal Investment (loss), Social constrained and Desire to Excel (Social) were positively and Sport Enjoyment was negatively related to Constrained Commitment. The self-contracted health attitude scale was positively associated with Constrained Commitment. Enthusiastic Commitment has a positive, while Constrained Commitment has a negative relationship with future orientation.

*Conclusions:* Consequently, most of the motivation resources contributed to engagement in sports activity. The expanded commitment model suggests that motivations, health attitudes and future orientation may interact. We believe that our study provides useful information for better understanding of young athletes' sports motivation.

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## Gratitude in Palliative Care: A Promising Lead?

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**Keywords:** gratitude, quality of life, palliative care, psychological distress

*Background:* Several studies, mostly realized with non-clinical populations, have shown a link between gratitude and key dimensions of palliative care (e.g. psychological distress) [1, 2, 3, 4]. The relevance of gratitude in the palliative context still needs to be verified [5].

*Aims:* The aims are (A) to evaluate the link between gratitude and quality of life (QoL), psychological distress, post-traumatic growth, and health status for palliative patients; and (B) to assess if these variables predict QoL.

*Methods:* We performed an exploratory and cross-sectional study with palliative patients of a university hospital. Validated questionnaires were used to measure QoL (McGill Quality of Life Questionnaire Revised), gratitude (Gratitude Questionnaire 6 items), psychological distress (Hospital Anxiety and Depression Scale), post-traumatic growth (Post-traumatic Growth Inventory), and health status (ECOG). Spearman correlations and multivariate analyses were performed.

*Results:* Sixty-four patients participated (30 men, mean age= 67, SD= 13.5). First, the results indicated a significant and positive correlation between gratitude and QoL (total ( $r=.376$ ,  $p=.003$ ), physical ( $r=.296$ ,  $p=.021$ ), psychological ( $r=.298$ ,  $p=.020$ ), existential ( $r=.454$ ,  $p=.000$ ) subscales), and gratitude and post-traumatic growth (appreciation of life subscale ( $r=.426$ ,  $p=.001$ )). A significant and negative correlation was found between gratitude and psychological distress (total ( $r=-.324$ ,  $p=.013$ ), depression subscale ( $r=-.359$ ,  $p=.006$ )), and gratitude and health status ( $r=-.266$ ,  $p=.039$ ). Second, multivariate analyses showed that the model explained 51.9% of the variance for QoL ( $F= 15.588$ ,  $p=.000$ ), including psychological distress ( $\beta=-.640$ ,  $p=.000$ ) and gratitude ( $\beta=.258$ ,  $p=.027$ ) as significant predictors.

*Conclusion:* The results suggest that gratitude may act positively on the patients' QoL, and may be a protective factor against psychological distress. The adaptation of gratitude-based interventions to the palliative context represents the next research step.

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## Measuring Gratitude in Germany: A German Validation Study of the Gratitude Questionnaire-Six Item Form (GQ-6-G), the Multi-Component Gratitude Measure (MCGM-G) and Relations to Self-compassion

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**Keywords:** gratitude, validation study, Gratitude Questionnaire-Six Item Form, Multi-Component Gratitude Measure, self-compassion

*Background:* Gratitude has been conceptualised as an emotion that arises when valuable help is offered. However, it can also be seen as a wider life orientation towards cherishing the positive in the world. A well-established tool for measuring gratitude in a unidimensional sense is the Gratitude Questionnaire-Six Item Form (GQ-6) [1]. A multifaceted measurement tool, the Multi-Component Gratitude Measure (MCGM), has recently been developed and offers a holistic approach to gratitude measurement [2].

*Aim:* To the best of the authors' knowledge there is no validated German measuring tool for gratitude. So in order to start closing that gap in research, the present study focused on providing validated German versions of the GQ-6 and the MCGM. To have a broader validation basis self-compassion was added. Based on prior research, it was hypothesised that higher scores on compassion towards the self should correlate positively with gratitude measured by the GQ-6 and the MCGM.

*Method:* Data was gathered through an online survey. The questionnaires were completed in random order by 508 participants. To test for construct validity, affect, wellbeing, empathy, awareness, self-compassion, anxiety and depression scales were included.

*Results:* The one-factor model of the GQ-6-G and the hierarchical structure of the MCGM-G could be replicated. Reliability analyses revealed a good internal consistency for both tools. As hypothesised the gratitude scales correlated positively with affect, wellbeing, empathy, awareness and self-compassion and negatively with anxiety and depression.

*Conclusions:* Positive Psychology research can rely on both tools for ongoing studies in the area of gratitude. The GQ-6-G and the MCGM-G are reliable and valid tools for measuring gratitude in Germany. The MCGM-G moreover enables the creation of gratitude profiles based on the conceptual items. That allows a direct cultural comparison of how gratitude is understood in Germany versus the UK and can thus be used in the future to explore different cultures.

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## Perceptions of the Moral Value and Elevating Effect of VIA Character Strengths: Predictors, Universality, and Links between Emotion and Value Ratings

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**Keywords:** character strengths, virtue, elevation, moral emotions, rating study

*Background:* The VIA classification [1] conceptualises character strengths as measurable individual differences that are universally morally valued, elevating to observers, and conducive to individual well-being. The 24 traits described in the VIA and operationalised in the VIA-IS have been shown by extensive research to be positively associated with individual well-being. Meanwhile, the perceived moral value and elevating effect of strengths, albeit prioritised by the VIA definition, received almost no empirical attention.

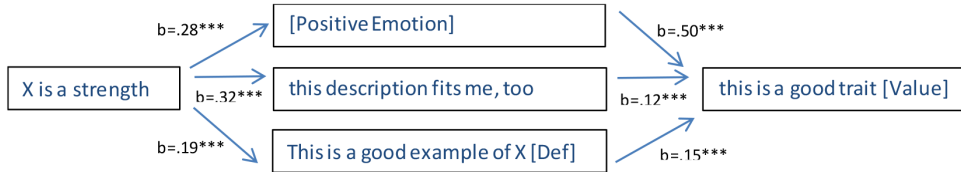
*Aim:* We explored the previously lacking perspective of moral and social psychology on VIA strengths by expanding on the limited evidence for their perceived moral value and elevating effect.

*Method:* 443 predominantly university-educated (77.7%) participants from 46 countries were randomly shown four third-person descriptions of traits based word-for-word on VIA-IS subscales, and rated the *value* and desirability of the trait described (12 items), how seeing it in someone might make them feel (*positive/negative emotion*, 12 items), and whether they *identified* with the trait (“this description fits me, too”), on five-point scales. Control variables included sociodemographic factors and familiarity with the VIA model.

*Results:* Outcomes on all rating scales, and *identification*, were skewed towards positive ratings and agreement with VIA criteria, and moderately to highly correlated. *Positive emotion, definition* and *identification* significantly mediated the relationship between agreement that a trait, under its VIA name, was a *virtue*, and ratings of the *value* of the qualities and behaviours actually reflected in its VIA-IS operationalisation. Multivariate analysis of covariance found the strongest effect on *value* and *emotion* for participants’ *identification* with descriptions ( $\eta^2=.315$ ,  $p<.001$ ), followed only distantly by which VIA strength was being rated ( $\eta^2=.060$ ,  $p<.001$ ). The total effect of *identification* on *value* ratings was significantly mediated by *positive emotion*. All sociodemographic and other covariates had non-significant or very small effects, indicating few inter- and intracultural differences in the general perception of strengths.

*Conclusions:* This study is a first step into the largely unexplored field of the moral psychology and social perception of character strengths. Links between ratings of the value and desirability of traits, and their emotional effect, suggests social intuitionism [2] about character. Experts’ and laypeople’s ratings of the value, elevating effect and definitions of VIA strengths may also inform revisions of the classification and related measures which claim to

reflect consensual definitions of traits that are not only conducive to individuals' well-being, but also socially and culturally valued. Cross-cultural research may further investigate the proposed universality of conceptions of virtue and good character.



**Figure 1.** Mediation between participants' identification with traits, and agreement with VIA criteria.

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## Passion Development in Adulthood

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**Keywords:** passion, development, flow, adulthood

*Background:* The Dualistic Model of Passion (DMP) has provided the leading theory of how passions develop [1]. Unfortunately, there is a paucity of research that provides empirical support for the three stages of passion development: activity selection, valuation, and integration. Additionally, as research has found that most individuals develop their passions during adolescence, the single empirical study of passion development focused on this population [2]. However, as youth age, many will not be able to continue to engage their passions due to physical and contextual constraints, pushing many individuals to find new passions while in adulthood. Unfortunately, the context of adulthood is characterized by its routines, rigidity, and lack of active leisure, making it difficult for many adults to find new interests and motivations to engage in them [3,4]. With such rigid schedules and important roles preoccupied, questions of how and why adults would engage in new interests are raised. One mechanism that can help explain the motivation for continuing to engage in a new interest and endure periods of instability in one's routine is flow [5,6].

*Aim:* The aim of this study was to elucidate the processes involved in the development of passions amongst an adult sample. To do this the current study tested the sequence of passion development as specified by the DMP amongst an adult population, which was subsequently compared against a model that contained flow. Lastly, this study tested the role of flow in the passion development process.

*Method:* Structural equation modeling using survey data from 419 adult participants was used to test the three aims of the study. Participants were asked to identify a single, "active," interest that they began participating in after the age of 28. The phases of passion development; activity selection, value, and internalization were operationalized as situational interest, basic psychological needs satisfaction, and total passion, respectively. The experience of flow was measured through the flow state scale regarding participants' memories of early engagement in the activity.

*Results:* Structural equation modeling provided support for the original model of passion development as specified by the DMP. However, the model with flow was found to fit the data significantly better. Due to this finding, flow was tested and found to mediate the association between situational interest in a new activity and basic needs satisfaction.

*Conclusions:* Support for the passion development process as specified by the DMP was found. However, amongst an adult population, it appears that flow plays a crucial part in the passion development process by mediating the relationship between initial interest and basic needs satisfaction. These findings can help inform various types of organizations on how to structure themselves to produce passions and ultimately increase well-being amongst adults.

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## **The Congruence between Meaning and Goals and its Relationship to Well-being in Different Life Domains: A Cross-Country Exploration**

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**Keywords:** goals, meaning, correspondence, well-being

*Background:* People invest significant effort and time in pursuing personally important and meaningful goals. Meaning has also been defined as goal directedness or purposefulness, because it comes from pursuing personally important goals. The eudaimonic perspective posits that goals associated with meaning contribute to well-being.

*Aim:* The aim of the present study was to examine the congruence of most important goals with what is perceived as meaningful in life for three life domains (family, work and interpersonal relationships), and to found out whether the alignment between goals and meaning is related to well-being.

*Method:* The sample consisted of 648 participants from three countries (Italy, Croatia and South Africa), with a mean age of 44.1 years. Participants were asked to list three most important future goals and three most meaningful things in their present life. In addition, they rated meaningfulness across life domains and completed the Satisfaction with Life Scale, PANAS and Mental Health Continuum.

*Results:* The highest congruence between goals and meaning was found for family. In work domain, participants were equally distributed across four congruence groups. Whereas interpersonal relationships were perceived as meaningful things, they were sparsely listed as goals. Participants with congruent goals and meaning experienced higher level of meaningfulness in the specific domain. Furthermore, the alignment of goals and meaning or attributing meaning to family was linked with higher life satisfaction. Some country differences were found in the alignment of goals and meaning and its association with well-being. Generally, the most prominent differences were observed in well-being of participants who did not set goals or attributed meaning to specific life domain, with Italian participants showing lower well-being than Croats and South Africans. Differences in the goal-meaning congruence associated with demographic variables were found. Males are more likely to achieve congruence between goals and meaning related to work. Married participants and those having children are more prone to achieve congruence between goals and meaning linked with family and work.

*Conclusions:* The findings confirmed that the experience of meaning is important for well-being. Although the alignment between goals and meaning is beneficial for well-being, it also depends on the life domain. Whereas such alignment is important for family and work, interpersonal relationships are rarely set as a goal. Demographic and cultural factors may constrain the process of aligning goals with meanings.

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## The Mediating Role of Optimism on the Relationship between Leader Member Exchange and Employee Engagement: Evidence from the Irish Further Education and Training Sector

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**Keywords:** leader-member exchange, employee engagement, optimism, mediator, quantitative

*Aim:* Employee engagement facilitates work performance and greater employee wellbeing and is associated with improved organisational outcomes and individual benefits [1]. Fostering this engagement is a strategic imperative for organisational leaders as they navigate challenges linked to public sector reforms. While connections between leadership and employee engagement are established [2], the role of the leader in fostering employee engagement has received limited attention. LMX theory, based on the premise that leaders develop unique, reciprocal exchange relationships with each employee has proven effective in predicting employee outcomes [3] and more specifically engagement [4], [5]. In addition, studies have offered support for the role of personal resources (including optimism) as predictors of employee engagement [6] and as a possible mediator of the relationship between leadership and engagement [7].

Building on this research the paper examines the influence of LMX and its sub dimensions as predictors of Employee Engagement through the mediating mechanism of optimism in the Irish Further Education and Training (FET) sector.

*Method:* Data was collected from a purposive sample of 156 teaching staff in three Education and Training Boards (ETBs) using a quantitative online survey

*Results:* Significant relationships were found between LMX (and its subdimensions) and employee engagement. Mediation analysis reveals that optimism mediates between LMX and employee engagement at the 95% level.

*Conclusions:* The implications of these findings mean that organisational leaders seeking to improve employee engagement in the FET sector need to consider both the direct impact of LMX on engagement and the indirect effect of LMX on engagement through optimism. Such a study will contribute to an enhanced understanding of the ways in which leaders can influence employees' engagement, which will inform leadership and employee practice in context.

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## The Character Course for Churches: Adapting Character Strengths Interventions for a Faith-Based Context

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**Keywords:** character strengths, interventions, religion, Christianity

*Background:* In recent years, empirical evidence suggests that psychological interventions targeting character strengths (CSs) can produce significant improvements in psychological wellbeing [e.g. 1]. Interventions have demonstrated effectiveness in targeting multiple CSs associated with wellbeing, and individual CSs [see 2]. Many of these interventions are relevant to religious and spiritual communities, and have been welcomed as such. Nevertheless, while some empirical work has been completed [3], CSs have not received wide dissemination and evaluation in Christian churches.

*Aim:* This presentation outlines the initial research and development phase of a multi-strength intervention with the working title ‘The Character Course for Churches’ (CCC), a three year project to adapt, disseminate and evaluate CS interventions with church-based small groups across the UK. It will outline the rationale, structure and content of the course, and detail the pilot and evaluation methodology to come.

*Method:* The CCC, is derived from interdisciplinary scholarship drawing from positive psychology, philosophy and biblical studies. It involves a systematic review of relevant empirical psychological literature, applied CS interventions, and lexicographic analysis of biblical terms. Various illustrative examples of the interplay between psychological, philosophical and theological sources are examined, with particular attention to areas of tension and affinity relevant to bringing CS interventions to a church population.

*Results:* A programme of eight two-hour sessions designed for church based small groups. Each contains a short video, discussion questions and homework exercises to be practiced between sessions. The course covers key CSs chosen based on empirical literature: learning, hope, love, gratitude, forgiveness, humour, persistence and curiosity. Samples of these sessions will be offered as part of the presentation.

*Conclusions:* In the next phase of the project, the CCC will be piloted with a sample of church-based small groups, and then subjected to a national evaluation consisting of over a thousand participants across the UK. Following this the programme will be available online as an open access resource.

### Acknowledgments

This project is funded thanks to a generous contribution from the John Templeton Foundation (#60923)



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## Rumination, Event Centrality And Perceived Control As Predictors Of Posttraumatic Growth And Distress: The Cognitive Growth And Stress Model

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**Keywords:** event centrality, perceived control, posttraumatic growth, posttraumatic stress, rumination

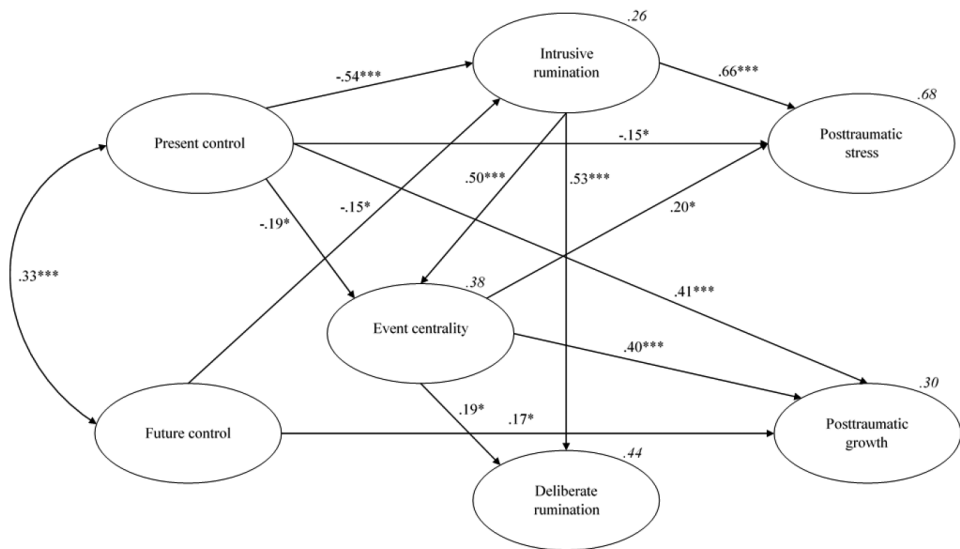
*Background:* In the past two decades, research has focused on the phenomenon of positive changes that can be reported following adverse life events, known as posttraumatic growth [1]. Positive changes can co-exist alongside negative changes in psychological functioning [2], although cognitive factors that distinguish between people's reports of posttraumatic growth and posttraumatic stress are still poorly understood.

*Aim:* The Cognitive Growth and Stress (CGAS) model draws together cognitive processing factors previously untested in a single model. Intrusive rumination, deliberate rumination, present perceived control, future perceived control and event centrality were assessed as predictors of posttraumatic growth and posttraumatic stress.

*Method:* The CGAS model is tested on a sample of people ( $N = 250$ ) who have experienced a diverse range of adverse events, using structural equation modelling techniques.

*Results:* Overall, the best fitting model was supportive of the theorised relations between cognitive constructs, and accounted for 30% of the variance in posttraumatic growth and 68% of the variance in posttraumatic stress across the sample.

*Conclusions:* Rumination, centrality and perceived control appear to be key determinants of positive and negative psychological change. In its first phase of development, the CGAS model presented here highlights key factors and the potential pathways to growth and distress following adverse events.



**Figure 1.** Standardised solution for the final CGAS model. R<sup>2</sup> for each endogenous variable is shown in italics. Observed variables, error terms and non-significant paths are not included for simplicity. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

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## Using Positive Psychology in Career Counselling at High Schools: A Study in Cyprus, Greece, Ireland, Italy and Lithuania

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**Keywords:** career counselling, focus groups, positive psychology

*Background:* In search for new theories and methods that can be applied in career counselling, some authors have recently turned to the framework of Positive Psychology. The literature suggests that using the principles of positive psychology not only improves career counselling techniques, but is a truly necessary component of them (Burke, 2015; Long, 2015). It has been found that career counselling methods based on positive psychology may help increase psychological resilience, maintain students' positive emotions, and add to character strength development (Magyar-Moe, Owens, Conoley, 2015; Miller, Ciccocioppo & Flessati, 2013).

*Aim:* The aim of our study was to reveal whether high school career counselors are familiar with the positive psychology approach, to what extent they use positive psychology interventions in their practice, and what country-specific challenges arise.

*Method:* The study was conducted in the framework of an international SUCCESS project (Erasmus+). A focus group method was used to collect the data in Cyprus, Greece, Ireland, Italy and Lithuania. Positive psychology principles in career counselling was the main topic of the focus group discussions (2 groups per country, 6 participants per group). All participants were career counsellors working in high schools. We used thematic analysis to identify themes and patterns that emerged from the data.

*Results:* The participants were familiar with the benefits of positive psychology and had some informal experience using its principles in career counselling, such as capitalising on student abilities, positive experiences, and personal strengths. On the other hand, the participants reported little or no formal knowledge of specific positive psychology theories, core concepts and their application in career counselling interventions. This suggests the need for more information (and possibly, additional training) on the topic. Also, several country differences in the use of career counselling techniques were found, that are presumably due to different school counsellor education and training systems in Cyprus, Greece, Ireland, Italy and Lithuania.

*Conclusion:* Career counsellors who participated in the focus groups were aware of the positive psychology approach and had an interest in learning how to use it in their practice. However, our findings show that there is a certain lack of information about the possibilities to use positive psychology interventions in career counselling with high school students. Within the framework of the SUCCESS project, we plan to complement the current findings with additional data. This will further serve as the basis for creating an accessible practice-oriented training package for school counsellors in different countries.

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## Can you Fake it 'Til you Make it? Examining Emotional Labour and Well-being in Educational Leaders

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**Keywords:** educational leadership, emotional labour, wellbeing

*Background:* The wellbeing and stability of an educational leader has a significant impact on teachers, students and the school community. Emotional labour is the process of manufacturing one's emotions to suit the needs of a workplace. This requires the individual to monitor their own emotions and express them only in a way that is conducive to the organisation's 'emotional display rules'.

*Aim:* This mixed methods study investigated the role of self-efficacy and social support in educational leaders' management of emotional labour, and whether emotional labour promoted overall wellbeing.

*Method:* Sixteen educational leaders participated in semi-structured interviews about emotional labour, and completed an online survey which included the Multidimensional Scale of Perceived Social Support and Generalised Self-Efficacy Scale.

*Results:* Results indicated there were 6 main ways educational leaders manage emotional labour. These were: emotion-focused coping, problem-focused coping, focusing on effective leadership, work-life dividing and social support outside of and at work. It was also found that a work-life divide is likely to protect educational leaders from experiencing negative implications in their personal lives as a result of emotional labour. Interestingly, it was also found that focusing on effective leadership was a popular method of managing emotional labour. Low social support was related to negative emotional labour implications.

*Conclusions:* Leader instability and decline of leader wellbeing has shown to relate to negative outcomes for school environments, teachers and students. Emotional labour is a key component of the work of educational leaders which, with careful management, can have a positive influence on leader wellbeing.

### Acknowledgments

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## Quantifying Between-Nation Wellbeing Differences Amongst Nations Within the European Social Survey

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**Keywords:** well-being, subjective well-being, happiness, life satisfaction, national differences

*Background:* Frequently, between-nation differences in wellbeing are reported and attributed to between-nation differences in social, economic and political factors. There is however some evidence that these between-nation differences are likely over-estimated as they fail to account for the extent to which wellbeing varies within-nations and within individuals.

*Aim:* The presentation will first report the random variance components of multiple wellbeing indicators from a 2-level multi-level model in which citizens are nested within nations. This will demonstrate the extent to which wellbeing variance actually varies at the between-nation level. Second, the presentation will examine the extent to which between and within-nation differences in social, demographic and economic factors account for wellbeing variance at the between and within-nation levels.

*Method:* Participants ( $n = 43,000$ ) from 23 countries were from wave 3 of the European Social Survey (ESS) undertaken in 2006. Analyses were undertaken in a multi-level framework with citizens nested within-nation in order to derive maximum likelihood estimates and standard error which adjust for the nested data hierarchy. Participant data was adjusted for 1) a design weight which adjusted for a sampling probability reflecting their likelihood of being recruited for the study, and 2) a population weight which adjusts for the extent individuals reflected a nation's population.

*Results:* Across wellbeing indicators, only a small fraction of wellbeing variance was accounted for at the between-nation level (<5%). Most of the variance in the random intercepts (between-nation level) approached zero in conditioned models whilst there was still considerable variance remaining to be explained within nations and individuals. Comparatively, within-nation factors were the strongest drivers of wellbeing. Comparison of Best Linear Unbiased Predictions (BLUPs) for each nation indicated that raw national aggregated wellbeing means over-estimate between-nation wellbeing differences.

*Conclusions:* Many prior cross-national wellbeing comparisons may well overestimate between-nation differences as they fail to account for the extent to which wellbeing varies between nations, within-nations and within individuals. Within a multi-level framework it was possible to demonstrate that within-nation factors were by far more substantive drivers of wellbeing outcomes in comparison with between-nation factors. Interpretating between-nation effects needs careful consideration since such little wellbeing variance is accounted for at the between-nation level.

## Flow-promoting Leadership Development via Serious Games

Zoltan Buzady

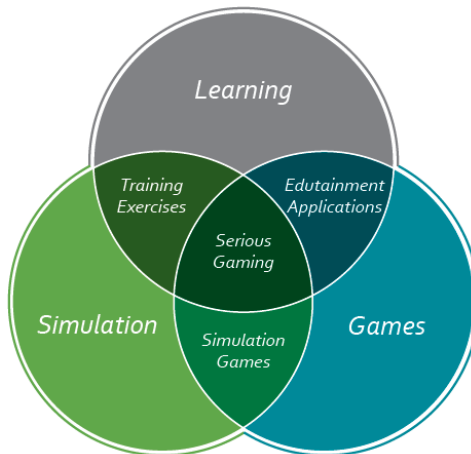
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**Keywords:** flow, leadership, leadership development, serious games, management education

*Background:* Mihaly Csikszentmihalyi’s Flow theory has become a globally known and used concept in many disciplines of science and practice, ranging from sports, music, pedagogy over management science to leadership and decision making science. Whilst many people have a vague understanding or notion about what the concept of Flow/Optimal Experience refers to, only a few attempts have been made to find contemporary training tools to convey the notion of Flow into modern business and management sciences, and in particular executives education. During the past few years Csikszentmihalyi has created his own official leadership developed program and an accompanying digital learning and training solution.

*Aim:* This contribution/paper focuses on his new, computer-based and/or online learning tool and we aim to present its conceptual and pedagogical features by help of which new generations of leaders and executives are being currently educated and trained about how to create a ‘Flow-promoting Leadership’ style as described by Csikszentmihalyi [1] and by Buzady/Marer [2].

*Method:* For operationalising the new phenomenon of Serious Gaming, we present the following three, overlapping perspectives and disciplines: Learning, Simulations and Games.



**Figure 1.** Serious Gaming at the intersection of Learning, Simulation and Games (Source: Marer, Buzady and Vécsey [3])

*Results:* The result of your work is that Csikszentmihalyi's official serious game is a versatile and effective tool for training and teaching the concept of Flow within a leadership development program, moreover his solution also opens new vistas for further applied and fundamental research: the ever growing number of global players of this serious game constantly feed a huge database of non-intrusive leadership decisions which in future will be explored by new academic and applied research studies focusing on the 29 leadership skills which Csikszentmihaly highlighted as being key for successful, Flow-promoting organizations [1].

*Conclusions:* Modern serious games do create an experiential, interactive and well tailored understanding and practice of the concept of Flow in business, and are an innovative tool to popularise the concept of Csikszentmihalyi's Flow-promoting Leadership in an easily scalable and effective manner.

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## “Did You Care about Yourself Today?”

### Wellbeing at Work 4.0 - Everything Starts with the Responsibility of Ones One Well-being

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**Keywords:** wellbeing at work, work performance, health at work, motivation, stress coping

*Background:* Work environment 4.0 is defined by permanent change, overload of duties, unsafety and **lack** of orientation. Companies in Germany face a work force which is permanently on duty and loses joy, health and power. On the other hand there is a lot of good will to support employee's health – not only to make them ready for a longer and harder working life but also to make them stay. On the individual **side** everyone has more duties and wants to reach more. We live longer and have highest expectations in regards to our performance. We often forget to balance our performance with investments in recovery, health and wellbeing. “First work, joy later” is a typical German saying. The individual person does not feel responsible enough for health and wellbeing.

*Aim:* Information should be spread about positive psychology to people at work places. They should understand how intention, thinking, feeling and behaving are connected and how one can create positive circles irrespective of all changings in work life. By understanding one's own influence a new responsibility for one's own wellbeing at work is expected.

*Method:* In studies about training of wellbeing factors one finds that control groups also gain from the participation even though they did not receive an intervention. The conclusion is: If one wants to change one's wellbeing it is already improving. Factors are most probably willingness and change of focus. The average author's speech time is 60 minutes. Before the presentation and after the participant is answering five questions about wellbeing and productivity. During the presentation the participant receives knowledge and reflection options about the positive **side** of life. The company gets an idea **of** how people feel at work and gets proof that one hour concentration on one's own wellbeing can change this already. The author discusses with the management the results for the company and in comparison with the average of the market (**benchmarking**). Finally further steps are discussed. So far 55 companies with 2766 people have been checked in the last two years.

*Results:* The average figures are increase of wellbeing by 10,72% , productivity 5,33% with peak values 23,13% for wellbeing and 12,3 % for productivity. There is always an increase. The amount is different.

*Conclusions:* The goal of the work is to deliver a discussion tool for companies and to strengthen interest of managers **to invest** in wellbeing at work. Figures are often more supportive than “just a talk”. It would be of interest to have a follow up after three and six **months**. The difficulty is that one can often not reach the same people because they are working in different departments and cities. The willingness to answer questions is often low

because companies already ask regularly a lot of questions. One limitation is that participants sit between colleagues who can see what they answer. Another one is that there is no control what happened before **the** participants attend the presentation and could have influence on their feelings. The content of the presentation is not exactly the same for different companies. Nevertheless the work helps to understand the importance of investments in wellbeing and to support staff to take over individual responsibility.

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## The Relationship Between Well-Being and Emotional Intelligence and its Related Constructs

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**Keywords:** well-being, emotional intelligence, regulation

*Background:* The relationship between well-being and emotional intelligence was investigated and documented in many studies, including a meta-analysis in 2015 [1]. Also, mindfulness, including openness to emotions, and emotion regulation are well documented predictors of well-being. [2]. Many studies investigate the well-being defined only as positive emotions or life satisfaction. Emotional regulation, emotional self-efficacy, openness to emotions are strongly correlated with emotional intelligence, partially overlapping. They might sum up into a more complex, significant relationship with well-being.

*Aim:* This study investigates the complex relationship between well-being and emotion abilities, defined and evaluated in an extensive manner, to find significant predictors of well-being components.

*Method:* Correlational study. Sample 184 subjects, by Snow ball sampling.

*Instruments:* PERMA-Profilier (Butler & Kern, 2016), WLEIS (Law & Wong, 2004), DERS (Gratz & Roemer, 2004), Comp-ACT (Francis, Dawson & Golijani-Moghaddam, 2016), RESE (Caprara & al, 2008).

For collected data, correlational and multilinear regression analyses were performed, using SPSS.

*Results:* PERMA-Profilier components share significant medium to high correlations with emotional abilities assessed with WLEIS, DERS, RESE and Compact ( $r > .5$ ,  $p < .01$ ).

Linear regression reveals that emotional intelligence explains 26% percent of well-being variation, assessed as accomplishments, engagement, meaning, positivity and relations. Emotional regulation, efficacy for emotional regulation and openness to experience/emotions are added, and multilinear regression analysis shows that the explained variation of well-being increases to almost 56%.

*Conclusions:* The study helps us to gain insight into possible factors to be targeted in optimizing well-being interventions. Emotional regulations self-efficacy and openness to emotions play an important role in well-being, along with emotional intelligence and emotional regulation.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518 <sup>a</sup>	.268	.264	16.982
2	.691 <sup>b</sup>	.477	.471	14.399
3	.748 <sup>c</sup>	.560	.553	13.242

a. Predictors: (Constant), WLEIS

b. Predictors: (Constant), WLEIS, RESE

c. Predictors: (Constant), WLEIS, RESE, COMPACT

**Figure 1.** Predictors of well-being

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## When Does Athletic Identity Help Athletes Reduce Athlete Burnout? The Moderating Role of Psychological Flexibility

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**Keywords:** self-concept, acceptance and commitment therapy, emotional exhaustion, reduced sense of accomplishment, devaluation

*Background:* Athletic identity could be an enduring and dynamic process that represents a set of meanings applied to the self in their social role (Burke & Tully, 1977) which is one of the most important topics in sport psychology and has received much attention in past decades (Ronkainen, Kavoura, & Ryba, 2016). Athletes continuously sculpt their identities through both positive and negative sport experiences, such as winning and losing. Thus, investigating athletic identity is critical because previous research has demonstrated that athletes' identities have protective effects on their adaptations, such as higher athlete satisfaction (Burns, Jasinski, Dunn, & Fletcher, 2012) and well-being (Verkooijen, van Hove, & Dik, 2012) and lower athlete burnout (Black & Smith, 2007). However, these studies (Black & Smith, 2007; Martin & Hom, 2013; Raedeke, 1997) might be oversimplified because they do not investigate the boundary conditions to identify when positive effects are enhanced, which would contribute to better adaptations (Coakley, 1992).

In this study, therefore, the authors introduce psychological flexibility as a potential moderator, which represents an ability to contact and take actions to address aversive private experience based on acceptance and commitment therapy (ACT) (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). We reason that psychological flexibility enhances the positive effect of athletic identity on athletes' adaptation because they are more likely to accept unpleasant experiences through open, and non-judgmental observations in the moment (Hayes et al., 2006) that solidify their identity in facing threats. In addition, we focus on an important psychological adaptation index for athletes: athlete burnout (Eklund & Cresswell, 2007; K. Goodger, Gorely, Lavalley, & Harwood, 2007). Athlete burnout may increase the risk of depressed mood, sport-related injuries, feelings of helplessness, loss of enjoyment, withdrawal from friends and colleagues and, in some cases, leaving sports altogether (K Goodger, Gorely, Lavalley, & Harwood, 2007; Gustafsson, Hassmén, Kenttä, & Johansson, 2008; Raedeke & Smith, 2001). Obviously, burnout leads to serious costs for both the athlete and the organization. Thus, identifying protective factors to reduce burnout become critical issues for both researchers and practitioners.

Previous studies have found a negative relationship between athletic identity and burnout (Black & Smith, 2007; Martin & Hom, 2013; Raedeke, 1997), the current study intends to advance previous research in several ways. For example, the present study investigates the longitudinal relationship between athletic identity and athlete burnout rather than their static relationship. Furthermore, we include psychological flexibility as a potential moderator that may enhance the effect of athletic identity in reducing athlete burnout over time.

*Aim:* The purpose of this study was to examine the relationship between athletic identity and changes in athlete burnout. The second aim was to identify the moderating role of psychological flexibility.

*Method:* Using a two-wave cross-lagged survey, the current study recruited 132 college athletes (mean age = 19.97 years) and administered measures assessing athletic identity, psychological flexibility, and athlete burnout.

*Results:* For the first aim, the results partially supported the first hypothesis, indicating that athletic identity predicted changes only in reduced sense of accomplishment, whereas the devaluation of sport and emotional exhaustion did not. However, the moderation analysis indicated that psychological flexibility strengthened the relationship between athletic identity and changes in three dimensions of athlete burnout. Simply stated, those with higher athletic identity experience lower athlete burnout from Time 1 to Time 2 when the athletes also possess higher psychological flexibility. In summary, our hypotheses were supported.

*Conclusions:* Athletes frequently experience pressure; as such, they constitute a high-risk population. Thus, identifying factors that prevent athlete burnout are important issues for sport psychologists. We present the first longitudinal study to demonstrate that athletic identity accounted for changes in athlete burnout, at least for the reduced sense of accomplishment. In addition, this study also provided new knowledge through its identification of psychological flexibility as enhancing the positive effect of athletic identity in decreasing athlete burnout over time. These findings provide important information for sport researchers and practitioners in their design of programs that aim to prevent athletes' burnout.

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## The Benefits of Music Education on Personal Strengths and Emotion Regulation.

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**Keywords:** positive education, emotion regulation, personal strengths, music

*Background:* A growing number of programs, interventions and strategies have been developed within a movement called Positive Education, focused on cultivating dimensions such as values, social and emotional skills, resilience and, ultimately, well-being [1]. Positive Education suggests that beyond academic achievement, schools must develop youth in a holistic manner [2]. In addition to stand-alone courses that teach content and skills leading to wellbeing, positive psychology can be embedded into some basic academic courses. Music is a good example of a course that can be infused with positive psychology contents. Previous studies have showed that music can help regulate difficult emotions [3] and it is related to the development of some personal strengths [4].

*Aim:* The aim of this study is to analyze the effects of embedding a music class with some positive psychology contents, such as the use of music to regulate difficult emotions, and develop some personal strengths (i.e., appreciation of beauty, creativity and teamwork).

*Method:* 199 high school students from the music class and 167 students from the control group completed self-report measures of general satisfaction for school and classroom climate from the Values in Action Inventory of Character Strengths for Youth (VIA-Y) [5] and the Difficulties in Emotion Regulation Scale (DERS) [6]. Same questionnaires were completed again at T2 (the end of term).

*Results:* After the term, students from the music class showed significantly higher levels of appreciation of beauty [ $F(1,36)=6.32, p=.01, \eta p_2=.02$ ], creativity [ $F(1,36)=16.49, p<.001, \eta p_2=.04$ ] and teamwork [ $F(1,36)=5.41, p=.02, \eta p_2=.01$ ] than the control group. Moreover, in comparison to the control group, students from the music class showed lower levels of emotional rejection [ $F(1,362)=4.73, p=.030, \eta p_2=.01$ ] and lack of emotional attention [ $F(1,362)=5.68, p=.02, \eta p_2=.01$ ]. Emotional lack of control, life interference and emotional confusion did not show significant changes.

*Conclusions:* The results showed that music education in which PP components have been embedded had a positive effect on the development of some personal strengths and it was also a helpful tool to improve some emotion regulation skills (i.e., emotional rejection and emotional attention). Implications of these results will be discussed. Although there is much to learn about best practices for implementing positive education at schools and how to embed well-being into basic academic courses, this strategy show an immense promise for helping students to thrive.



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## The Combined Effects of Parental Autonomy Support, Psychological Control and Structure on Youth Outcomes

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**Keywords:** self-determination theory, parenting, autonomy support, psychological control, structure

*Background:* Research showed salutary effects of parental autonomy support (AS) and structure, and the debilitating effects of psychological control (PC) on child development. According to self-determination theory (SDT), structure complements AS to fulfil the psychological needs for competence and autonomy while PC is incompatible with AS and hence is likely to undermine needs satisfaction.

*Aim:* This study aimed to examine the combined effects of the three parenting dimensions and their links to youth outcomes (psychological needs satisfaction, scholastic and social competence). Using two data analysis approaches—person- and variable-centered—this study sought to provide varied empirical perspectives for understanding parental influence on youth development.

*Method:* University students' (N = 210) participated in the survey with maternal and paternal variables analysed separately. Latent class analysis and linear regression were used to analyse the data. Latent class analysis identifies patterns of AS, structure and PC and shows their links to youth outcomes while linear regression offers evidence for the interaction effects that structure and PC respectively have on the relationship between AS and youth outcomes.

*Results:* Latent class analysis yielded three-class solutions for both maternal and paternal parenting dimensions. Both maternal and paternal parenting profiles with highest levels of AS and structure together with lowest level of PC predicted highest levels of youth outcomes, while their mirror-image profiles predicted the lowest levels of youth outcomes. The third profile with moderate levels of all three parenting dimensions was associated with moderate levels of youth outcomes. Interaction analyses of the relationship between AS and youth outcomes with either structure or PC as a moderator showed the synergistic and undermining effects of structure and PC respectively.

*Conclusions:* In line with SDT, findings demonstrate the importance of perceived high levels of parental AS and structure but low level of PC on strengthening the inner resources (i.e., fulfilled psychological needs) and competence of youths. Structure is differentiated from PC in that high level of structure enhances the effect of AS on the studied youth outcomes while high level of PC diminishes them.

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## Students Well-being: the Role of Basic Psychological Needs Satisfaction

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**Keywords:** engagement, basic psychological needs, burnout, typology of students well-being, preventive counseling

*Background:* Korean students high ranked in academic stress and suicide rate [1] and generated abundant studies on well-being among Korean students [2][3], limitedly from the post counseling approach. Someone who exposed to sustained stress may suffer from burnout, featured with exhaustion, cynicism, and inefficacy [4][5] and others with a positive, fulfilling state of mind on their psychological work may experience engagement, featured with vigor, dedication, and absorption [6]. Researchers [4][7] attempted to establish a typology of employ well-being and revealed the distinctiveness between workaholism and burnout to prevent workaholism developing toward burnout.

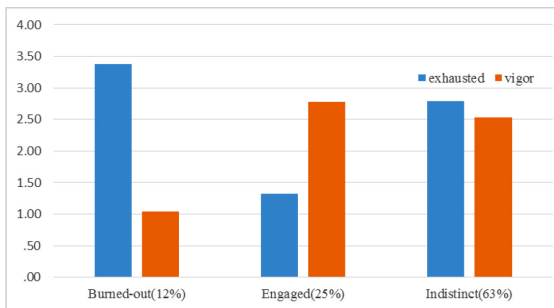
*Aim:* This study aimed to explore a typology of well-being among students with academic burnout and engagement and to investigate features of each profile by considering three components of basic psychological needs (BPN). By doing this, the current study was expected to set up the significant aspect for successful preventive counseling [2], not for the post counseling approach.

*Method:* Total 334 of Korean students (male = 130) belong to university or plan to re-take K-SAT (Korean Scholastic Aptitude Test) for entrancing college, participated in this study. The current study used following measures; Academic Burnout [9] modified version of Maslach Burnout Scale-Students Survey[10], Academic Engagement [11] modified version of Utrecht Work Engagement Scale [12], Korean version of the Basic Psychological Need Scale [13] validated version of BPN [14], Academic demand [9] modified version of the English one [15]. In order to investigate a typology of well-being regarding academic work, the latent profile analysis (LPA) known as a person-centered method [16] was performed using exhaustion as burnout and vigor as engagement. Several criteria including AIC, BIC, ABIC, LMR, BLRT, entropy, and posterior probability were used to decide the optimal number of clusters. Sequential analysis of a multinomial logistic regression with covariates (i.e., autonomy, competence, relatedness, demand) was conducted to figure out characteristics of the identified profiles.

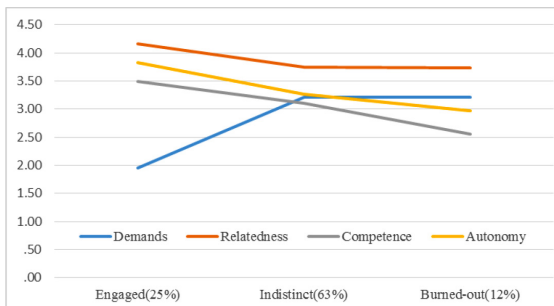
*Results:* Results of LPA supported three profiles; *the engaged*, *the burned-out*, *the indistinct*. The third cluster featured with a moderate level of extent both in exhaustion and vigor was named as *the indistinct*. A multinomial logistic regression analysis disclosed features of three profiles. Students who perceived higher autonomy and competence, with lower demands are more likely to belong to *the engaged* than *the burned-out*. Students with higher autonomy and lower demands are more prone to be *the engaged* than *the indistinct*. Students with higher relatedness and lower competence are subject to be *the burned-out* than *the indistinct*.

*Conclusions:* Findings are line with previous studies to suppose the critical role of BPN [17][18]. However, the unexpected result to show that a combination of relatedness and competence may a distinctive feature between *the burned-out* and *the indistinct* should be discussed. *The indistinct* may be regarded as a pre-stage which can develop into *the burned-out* or *the engaged*, which needs a precautious care from the perspective of BPN. Results imply that the level of engagement as well as one of burnout should be taken into account building a strategy for pre-intervention for the potential *burned-out* (i.e., the *indistinct*). The present study may contribute to preventive counseling, not post-counseling in academic-setting.

**Figure 1.** Insert Figures here, if applicable. File size is limited to 2 Megabyte. Reduce the size of images, graphs, etc. if your file size exceeds this limit.



**Figure 1.** The three profiles of students well-being (N = 334)



**Figure 2.** The characteristics of three profiles

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## **Title: Trust in the Therapeutic Relationship: A New Comprehensive Definition, An Original Theory and Clinical Framework**

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*Background:* Compromised ability to trust is a key psychological feature in relational complex trauma, psychological injuries and extreme adversity. Restoring trust is an important condition and a positive sign of recovering (Chouliara et al., 2011; 2013; 2017; Chouliara & Narang, 2017). Trust also lies at the foundation of nearly all major theories of interpersonal relationships and human development. It has been intrinsically linked to attachment, social cohesion, and family relationships. Despite its great theoretical importance, a limited amount of research has examined how and why trust develops, is maintained, and is occasionally disrupted in relationships. Such lack is even more distinctive in the case of therapeutic trust.

*Methods:* Qualitative semi-structured individual interviews were utilised. Transcripts were analysed using Interpretative Phenomenological Analysis (IPA) to identify recurrent themes. A total of 13 participants, 10 clinicians and 3 key informants, working in the field of relational complex trauma, were interviewed. Themes were modelled to identify their situated nature, whereas links between were identified to informing the development of a clinical framework.

*Findings:* Recurrent themes, which constitute an original theory of therapeutic trust, included: 1. *The Nature*, 2. *The Function*, 3. *The Components*, 4. *The Process*, and 5. *Challenges* of trust. A comprehensive definition of trust as *a relational mechanism of regulating psychological threat and managing vulnerability, by reducing anxieties, promoting safety and inducing growth based therapeutic experiences* is put forward. The first clinical framework of therapeutic trust is proposed, including four cornerstones of trust: 1. Consistency & Gradual Change, 2. Safety & Flexible Stability, 3. Benevolent Presence & Mutual Connection, 4. Transparent Humanity & Balanced Power.

*Discussion:* Our findings fill gaps in the literature by highlighting the role of relational variables in the effectiveness of psychotherapy. Findings have implications for the development of trust based interventions for increasing engagement and managing drop outs, when working clinically with severe and/or complex clients. In an increasingly traumatogenic world, more clinicians will be called to work in fragile process, where disengagement, drop outs and alliance ruptures are highly prevalent. Managing trust and its ruptures is key for service delivery, training and supervision, if we are to provide safe, effective, and responsive mental health services in fragile process and beyond.

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## Improving self-control and subjective well-being by a three-week self-control training program: An experience sampling study

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**Keywords:** self-control training, well-being

*Background:* In investigating how to improve people's well-being, there are few variables as crucial as self-control [1-3]. Nevertheless, young adults in both western and eastern cultures reported a relatively low level of self-control (as compared to other character strengths) [4]. Fortunately, recent studies in social psychology suggested that repeated practice of small acts of self-control such as avoiding sweet can improve self-control [5-8]. For example, Finkel and his colleagues [5] asked people to regulate their speech (e.g. avoid using filler words and shorthand terms) for two weeks and found that this "exercise" reduced aggression. In addition, repeated practice of self-control was also found to improve performance in cognitive inhibition task [6] and prevent smoking relapse [7]. These studies suggested that self-control is trainable. Yet very few studies have examined the effects of this training paradigm on subjective well-being. Since self-control is a strong predictor of well-being, it is expected that self-control training is also an effective and sustainable way to improve well-being.

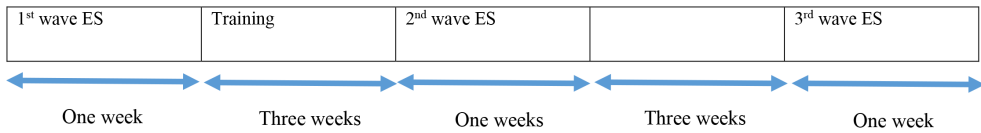
*Aim:* The present study aimed to use an extensive experience sampling method to test the effect of self-control training (repeated practice of small acts of self-control) on daily life self-control experiences and well-being.

*Method:* Fifty-five participants (43 females, 17 males;  $M_{age} = 20.07$ ,  $SD_{age} = 1.17$ ) were recruited from Hong Kong universities. In the pre-training phase, participants' baseline level of self-control and well-being was assessed by a one-week experience sampling survey. Five signals were sent to participants each day in randomly via smart phone. In each survey, participants were asked answer questions about their experience of self-control conflicts [9] and subjective well-being (satisfaction with life and positive affect). After that participants were randomly assigned to either practicing small acts of self-control or recording daily life activities for three weeks. Immediately after and one month after the training phase, participants performed the same experience sampling exercise as in Phase 1. The whole study lasted for 9 weeks (see figure 1). The response rate of all of the experience sampling phases was above 85%.

*Results:* The magnitude of the training effect on self-control and well-being was moderated by the nature of the self-control conflicts and goals. Overall, daily life self-control experience was related to well-being in all three phases of experience sampling. Further results would be discussed during the presentation.



*Conclusions:* With an intensive experience sampling method (5 signals per day X 3 weeks), the present study further pinpointed the role of self-control in subjective well-being. Importantly, self-control and well-being can be improved by a simple intervention although further investigation into the complex interaction between training method and nature of daily life self-control conflicts is needed.



**Figure 1:** Timeline of the study

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## Social Withdrawal and Wellbeing: Examining the Benefits of Solitude in Emerging Adulthood

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**Keywords:** social withdrawal, self-esteem, happiness, life satisfaction, social support

*Background:* Removal of oneself from social settings, referred to as social withdrawal, has been found to predict maladjustment [1]. Recently, three subtypes of withdrawal have been identified, including shyness, avoidance, and unsociability. Shyness is characterized by a desire to engage with others, which is inhibited by temperamental social fear [2]. Avoidance is marked by a strong desire for solitude and to avoid others [3]. Lastly, unsociability is characterized not by strong social fear or avoidance tendencies, but by social disinterest [4]. Most studies have focused on social withdrawal measured as a unitary construct; however, prior research distinguishing between subtypes indicates that shyness and avoidance are associated with internalizing problems and interpersonal difficulties, whereas unsociability is not, particularly during the emerging adulthood years [3]. The assumption that withdrawn behavior impairs psychological functioning [1] may be a vast oversimplification. Rather, some types of solitude may be beneficial.

*Aim:* Research differentiating withdrawal subtypes has focused on maladaptive outcomes [3]. This study's aim was to explore differences in wellbeing between shy, avoidant, unsociable, and sociable emerging adults.

*Method:* Participants were 813 Canadian university students (76% female, 68% Caucasian) between the ages of 18 to 25 ( $M_{\text{age}} = 20.2$ ,  $SD = 1.68$ ). Participants completed a series of self-report surveys. Indices of wellbeing included self-esteem [5], happiness [6], life satisfaction [7], and social support [8]. The Social Withdrawal and Social Isolation Scale [3] was used to classify participants into one of four groups: shy, avoidant, unsociable, and sociable.

*Results:* A MANOVA was conducted to explore differences in wellbeing as a function of gender and withdrawal subtype. Results revealed a significant main effect for withdrawal subtype. Post-hoc comparisons showed that unsociable students reported significantly higher self-esteem, happiness, life satisfaction, and social support than both shy and avoidant students. Unsociable students' wellbeing did not significantly differ from sociable students'. Although females reported significantly more support than males, a significant interaction between gender and withdrawal subtype was not found.

*Conclusions:* While social withdrawal is widely viewed as detrimental to psychological functioning, the present study suggests that unsociability may not pose the same risk to wellbeing as shyness or avoidance. Unsociable emerging adults experienced positive wellbeing comparable to their more sociable counterparts, indicating the benefits of solitude for unsociable individuals.

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## Exploring Posttraumatic Growth through Changes in Values Following Violence: Experiences of Survivors of the Troubles in Northern Ireland

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**Keywords:** posttraumatic growth, values, violence, growth

*Background:* Posttraumatic growth (PTG) has been observed following a variety of traumatic experiences [1]. One key element of PTG, that has yet to be researched, is positive changes in values[2]. Following violence, research suggests that participating in values congruent behavior can facilitate growth [3], further emphasizing the importance of understanding the role of values processes in PTG.

*Aim:* The aim of this study is to explore the experience of individuals whose values changed in positive and meaningful ways following victimization by political/religious violence.

*Method:* This study employed Interpretative Phenomenological Analysis; one semi-structured interview was conducted with each of 12 survivors who had been injured or traumatically bereaved during the Troubles in Northern Ireland. Participants were adults, representing both Protestant and Catholic communities, who were recruited through victim support groups throughout Northern Ireland, and self-selected for participation if they identified as having experienced positive values change after victimization.

*Results:* This study yielded 7 major themes describing the experience of positive change in values following violence: living your values helps; values can be chosen, and lived, no matter what; trauma clarifies values in all life domains; victims move towards values when honoured rather than neglected; shared values provide common ground for connecting to the “other”; and context influences values clarification and enactment. Participants also reported that positive values change can co-occur with on-going suffering, often related to a shattered worldview.

*Conclusions:* This study demonstrated that positive values change can occur in the aftermath of victimization. Participants shared that values can provide a sense of comfort and direction following exposure to violence, and that values may be a central component to the PTG process. Future studies should continue to examine the role of values in PTG, as well as values based interventions which may facilitate PTG.

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## Children's Subjective Well-being in Relation to Sociodemographic, Interpersonal and Experience Variables

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**Keywords:** children's subjective well-being, sociodemographic characteristics, interpersonal/experience variables

*Background:* There is an optimism bias regarding subjective well-being (SW), that is, most people tend to respond above the neutral point in 0-10 point scales (Casas, 2011). Little is known about the factors that contribute to children's SW, and the sociodemographic characteristics explain relatively low amount of the variance (Dinisman & Ben-Arieh, 2016). In fact, leisure, environment, relationships, freedom to choose, and self are important factors affecting children's SW (Lee & Yoo, 2017).

*Aim:* To present the dimensions of children's SW measured by a modification of BMSLSS<sup>1</sup> and PWI-SC<sup>2</sup> in relation to satisfaction with global life measured by a modification of SLSS<sup>3</sup>, as well as the sociodemographic and interpersonal or experience variables related to children's SW.

*Method:* A probabilistic sample of 3,962 school-aged children of the ten districts of the city of Barcelona in 2017 (M=10.73 years, SD=0.66; 48.76 % are girls) answered an online version of the third wave of Children's Worlds–International Survey of Children's Well-Being. Main analysis has been developed by models of multiple linear regressions.

*Results:* Differences are observed: health is the best evaluated aspect (M=9.37, SD=1.24; no gender effect), and free time, the least (M=7.83, SD=2.25; no gender effect). The 69.4 % of children are very satisfied with their global life (M=8.97, SD=1.34; no gender effect), whereas be heard by adults is the most important for being satisfied (Ad.  $R^2=.271$ ;  $\beta=.520$ ; sig.<.001). There are gender effects in other variables. Interpersonal/experience variables are more related to children's SW than sociodemographic.

*Conclusions:* In comparison with optimistic ones, it is necessary to characterize children that do not make optimistic evaluations of their SW because they may belong to vulnerable groups. Be heard by adults can be a relevant aspect to understand SW of all children. Whether differences in evaluations of children with the same sociodemographic characteristics are due to interpersonal/experience variables should be analyzed.

<sup>1</sup> Brief Multidimensional Students' Life Satisfaction Scale, BMSLSS (Children's Worlds, 2018; Seligson et al., 2003)

<sup>2</sup> Personal Wellbeing Index School Children, PWISC (Children's Worlds, 2018; Casas et al., 2013; Casas et al., 2012; Cummins & Lau, 2005)

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## **Growth and the Horror Genre: Exploring the Role of Horror in the Post-Traumatic Growth Journey**

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**Keywords:** post-traumatic growth, Northern Ireland, horror genre, resiliency

*Background:* Existing literature reports that watching horror films may negatively impact trauma survivors [1], even resulting in a condition called cinematic neurosis [2]. This illness is characterized by an increase in anxiety, somatic, and psychotic symptoms after watching a scary movie.

*Aim:* This paper will explore the experience of survivors of trauma, who have experienced posttraumatic growth, who report positive interactions with horror material. This paper will highlight the unique ways these individuals interact with the horror genre and attempt to identify components of this experience that may benefit other survivors of trauma.

*Method:* This paper will present a case study of two unique healing experiences reported by participants in a larger (N = 28) qualitative study employing Interpretative Phenomenological Analysis. This study explored positive changes in values following traumatic bereavement through religious and political violence of the Troubles in Northern Ireland. Participants engaged in one 1-3 hour semi-structured interview exploring their experience of positive changes in values following their victimization.

*Results:* Findings suggest that engaging with horror genres through viewing, re-telling, or writing frightening stories can foster personal healing after tragic loss. One participant was drawn to ghost stories as they provided a framework for understanding a family member's murder, while another participant channeled the disturbing emotions following his father's unjust death into the creation of horror novels. These results support the notion that horror material can strengthen feelings of control and communing with deceased loved ones in order to integrate past trauma into their daily lives.

*Conclusions:* These results pave the way for understanding why seemingly morbid ways of self-healing can facilitate post-traumatic growth. In order to provide individualized support for people who have experienced trauma, it is necessary to gain understanding on the diverse methods that can mitigate harmful past experiences. Future research is necessary to determine the therapeutic properties involved in trauma survivors connecting with frightening stimuli.

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## Validation and Enactment of the Positivity Projective Technique

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**Keywords:** conceptual metaphor theory, embodied cognition, positive psychology, projective technique, mixed methods

*Background:* Departing from traditional ambiguous projective techniques an unambiguous associative technique that may prompt positive dispositions regarding the self, others, or an object was developed. The Positivity Projective Technique (PPT) is informed by embodied cognition/conceptual metaphor theory and consists of an orientational metaphor logo.

*Aim:* Firstly, the aim was to validate the PPT qualitatively and quantitatively by conducting two independent studies.. The second aim was to explore to what extent the PPT could be enacted towards the promotion of positive action in the workplace.

*Method:* Firstly, data were collected from a convenience sample of 250 participants by means of a sentence completion technique, where after it was quantitatively (to a limited extent) and qualitatively analysed by means of content analysis. In a second study a quantitative, cross-sectional design was used and a self-report questionnaire was developed and administered to a non-probability sample of 271 participants. Statistical analyses were carried out in order to determine the factor structure of the PPT. Finally, for an exploration of the enactment possibilities of the PPT a post-modern, social constructionist approach was followed by means of the positive action research method of appreciative inquiry. A purposive sample of six participant took part in the appreciative inquiry workshop.

*Results:* The content analysis resulted in a wide range of meanings for positivity (almost 200) elicited by the PPT. Moreover, the PPT provided for both internal and external dispositions related to positivity and the results corresponded to the dominant positive psychology theories and constructs. Results from the statistical analysis of the second study produced eight sub-factors, clustered in such a way that it reflected the positive psychology canon, nested in a single positive affectivity factor. Results from the action research method suggest that the PPT's metaphor logo enabled participants to collectively construct a grounded theory of positive action for themselves in their workplace.

*Conclusions:* The results suggest that the PPT is a valid projective technique that may be used for effective positive development purposes of the self, groups, organisations, products and services.



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## **Work-family guilt and Coping Mechanism Adopted by Fulltime Employed Mothers in India**

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**Keywords:** work-family Guilt, employed mothers, coping mechanism, positive reappraisal, self-controlling

*Background:* Work-family guilt in case of employed mothers, remaining the most shouted topic of press, but the research lying in its infancy [1]. The minimal research done in this domain has mostly focused on antecedents and outcomes of work-family guilt. Studies have also been done on the impact of work-family guilt on individuals and organizations. Work-family guilt incurs a cost to the organization in terms of intention to quit, reduced organizational commitment, hampered extra role behaviors. At the individual level guilt being a strong emotions such as anger, fear, sadness and shame. It therefore is a potential explanatory variable that impacts individual well-being and, hence demands for coping mechanisms that stabilize an individual's physical and psychological state.

*Aim:* Therefore this paper aims to explore possible the coping mechanisms deployed to deal with work-family guilt, by mothers employed in full-time paid work. There was a need for guilt specific coping mechanism to be explored, as guilt being a strong emotion, carried potential for predicting its own coping mechanism, than the coping mechanisms designed for work-family conflict [2].

*Method:* Narrative research methodology was followed and semi structured interviews of mothers, employed in fulltime jobs were taken. Data was analyzed using Gioia's method of open coding, axial coding and final coding [3].

*Results:* The coping mechanisms being used by them are a combination of meaning focused coping, emotion focused coping and problem solving approach. Positive Reappraisal, remaining the dominant coping mechanism, followed by minimal problem solving and emotional support seeking from family, friends and counselors. Self-controlling came out as the dominant coping mechanism at workplace. .

*Conclusions:* Participants in this sample have perceived, emotions are not accepted at workplace. Expression of emotion is an indication non professionalism. Perceived gender stereotypes, like women are not good at emotions, has prohibited seeking emotional support at the workplace. Workplace socialization and mutual solidarity was missing.

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## **Different Paths To Flourishing: How Do Psychosocial Factors Interact in Youth to Generate Good Mental Health Functioning in Young Adulthood? A 10-Year Follow-Up**

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*Background and aims:* Although many young people report high levels of well-being, there remain some major concerns about their mental health: Rising rates of diagnosable and sub-threshold symptoms of mood disorders, self-harm behaviour, and other mental health problems are preventing some young people from attaining positive socio-emotional well-being. Therefore, more research is needed to identify the protective and risk factors that might prevent mental health problems and ensure good mental health among young adults. The main objective of this longitudinal project is to explore how different psychosocial factors interact in adolescence to generate good mental health in young adulthood.

*Methods:* A community cohort of 984 youth (mean age 14.5 years), encompassing all regular school students in a municipality with around 40,000 inhabitants in southern Sweden, were recruited for this study. A prospective design involving two measurement points (T1 and T2) separated by one year (2007–2008) was adopted. Furthermore, of the 984 youth, 546 (60% females; mean age 24.5 years) participated in a follow-up survey 10 years later (T3).

At T1 and T2, the focus was on examining mental health problems such as self-harm, disordered eating behavior, aggression, and victimization, although some positive mental health indicators (e.g. school satisfaction, aspects of prosocial behavior, relationships with parents and friends) were also assessed. At T3, besides the mental health problems, we assessed a number of well-being indicators, such as life satisfaction, flourishing, and emotion regulation.

*Preliminary Results:* Preliminary analyses revealed that more than 50% of participants reported high or very high life satisfaction at T3, and many reported high scores in flourishing as well. This begs the question: did they all have good mental health in adolescence? Furthermore, how does the situation look nowadays for those who reported mental health problems in adolescence?

In the conference, we will present both the cross-sectional and longitudinal results. Cross-sectionally, we explore the relationships between flourishing and different sociodemographic (e.g. educational level, marital status, current work situation) and psychological factors (e.g. resilience, social support, anxiety, depression, self-harm). However, the focus will be on the longitudinal results. Longitudinally, we will identify the risk and protective factors in youth that predict life satisfaction and flourishing, as well as psychopathology, in young adults after a ten-year interval.

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## **You created a Space Where We Again Felt Like Home – Reflections from Behavioural Lab**

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**Keywords:** reflections, self-awareness, connection, safety, growth

*Background:* A 5 day behavioural lab was undertaken in order to explore complex nature of values, beliefs and self-awareness that supported or impeded leaning, interpersonal relations and enhance the spirit of partnership. This was undertaken as a part of the orientation for the incoming batch of executive MBA at one of the premier business schools in India.

*Aim:* The aim was to help the participants explore their own beliefs and values, what creates connection and how one could create a safe space for connection and growth.

*Method:* The five day induction was planned to cover the notion of self in a safe environment that created connection for promoting partnership. The process began with exploration of self in the context of own values and beliefs. Each participant was invited to create his/her own coat of arms that depicted their values/beliefs, their goals, what supported or impeded their learning. After sharing each one's coat of arms, participants were invited to share a moment in their life when they experienced deep connection with self and others. This sharing was an invitation for them to begin creating safe spaces. During the next session they were invited to use photography as a tool to explore self, using the notions like frames, figure & ground, focusing, colour and composition. The third session focused on exploring self, using enneagram and functional fluency. The focus was on moving into a space of deeper self-awareness and building the capacity to exercise their choice of responding and not reacting to a stressful situation. The participants were invited to document self-reflections after each sessions and make a presentation in small groups of 4s. The last session invited them to use an innovative method of feedback to others and self and draw insights for their learning. They then created goals and set action plans to meet these goals.

*Results:* Data was collated using the participant reflections and feedbacks during the sessions. Qualitative analysis was undertaken to explore various themes that emerged during the 5 days and what meaning making participants made during their reflections.

*Conclusions:* Findings indicate that creating differing perspectives for deeper self-awareness through safe connections was powerful for creating partnerships and focusing on strengths and appreciate own gifts.

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## Context is King! The Importance of Organisational Climate in Facilitating Strengths Use in Workplaces

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**Keywords:** strengths, organisations, organisational climate, self-determination theory

*Background:* This study examined the organisational climate factors and manager behaviours that impact on an employee's capacity to translate strengths knowledge to strengths use. Use of strengths has been found to lead to enhanced wellbeing [1], and positive employee perceptions of one's organisation [2]. However, the research supporting strengths use in organisations is scant, particularly regarding the impact of situational context on strengths use.

*Aim:* The aim of this study was to investigate the organisational conditions that might predict increased strengths use. In addition, this study sought to determine which organisational factors would impact the relationship between strengths knowledge and strengths use.

*Method:* Data were collected via self-reported survey. We analysed the relationships between measures of strengths knowledge [1], strengths use [1], manager's perceived autonomy support (PAS) [3], and organisational climate factors [4] in a sample of staff (n=297) from an Australian secondary school.

*Results:* Surprisingly, PAS was found to have no significant impact on the relationship between strengths knowledge and strengths use. Further, hierarchical multiple regression indicated that PAS was not predictive of strengths use. Conversely, all factors of organisational climate were found to positively correlate with strengths use ( $r_s$  ranging from .21 to .39). Several factors of organisational climate (namely passion, purpose, and peace) were found to impact (mediate) the relationship between strengths knowledge and strengths use, and to predict strengths use, above strengths knowledge.

*Conclusions:* These findings demonstrate that the organisational context and climate of a workplace play important roles in facilitating individual strengths use, and may do so in the absence of strengths knowledge. Importantly, these findings also indicate that more positive employee perceptions of one's organisation may lead to greater strengths use, providing support for a reciprocal relationship. Creating an environment where employees feel engaged, aligned to the organisation's purpose, and that their wellbeing is valued, leads to employees using their strengths.

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## Happiness of Urban Communities in Indonesia Based on Cultural Values

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**Keywords:** happiness, Eastern Culture, Western Culture, multi culture, Indonesia

*Background:* Happiness is an important subject in the science of psychology and the theory of psychology is related to cultural-bound, regional values with limited validity. There were conceptual differences in Western culture and Eastern one<sup>2</sup>. The earlier adopt individualism and perceives happiness as an attainment of personal achievements. The later adoption of collectivism, where happiness depends on interpersonal relationship driven into social harmony<sup>3</sup>. In Eastern culture there is also a difference in focus even though one clump (Indonesia and Malaysia)<sup>1</sup>. These limitations make a difference when applied to different regions and cultures. The history of Indonesia is influenced by the European (Dutch, Portuguese) and Asian (Japanese, Chinese and Indian), as well as the great Hindu & Buddhist kingdoms such as Sriwijaya and Mojopahit, and Arab and Persian merchants through Gujarat in India bringing Islam to Indonesia. Indonesia is an archipelago country with approximately 18,056 islands (with 5 large islands), pluralistic, multicultural / multiethnic nation with a large number of ethnic groups, which is about 577-660 tribes based on the language.

*Aim:* The purpose of this study is as a preliminary study, which is to identify the construct of happiness in Indonesia which later to construct happiness constructs according to Indonesian society, so it can be a measuring tool to measure happiness according to the people of Indonesia.

*Methods:* This research is qualitative research adopting realism construction approaches with multi response to construct theory by involving 253 subjects. Qualitative research data processing with Nvivo7 .

*Results:* Findings on urban community that identified there are 5 sources of happiness: Achievement (education, organization, occupation, finance, achievement), Pleasure (hobbies, tours, me time, culinary, togetherness), Relation (spouse, nuclear family, extended family, friends), Physical (physical health), and Spirituality (religious activities, blessed, financial sharing).

*Conclusion:* The results of this study differ from previous studies. This result shows a combination of Western culture and Eastern culture. Although they live in the provincial capital, spirituality is an important factor in shaping happiness. This research will be continued to the districts that will be integrated with the urban community to build a theory of happiness in Indonesia.

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## Exploring the Associations between Early Maladaptive Schemas, Mindfulness and Psychological Flexibility

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**Keywords:** early maladaptive schemas, mindfulness, psychological flexibility

*Background:* Preliminary findings from few number of research and some theoretical background led us to question possibility of relationship between early maladaptive schemas (EMS), mindfulness and psychological flexibility. Moreover, in that sense, earlier studies has either focused on several psychological constructs closely related but different concepts as negative self-schemas and psychological mindedness [1, 2] or used a very small number of specific samples namely participants seeking substance use treatment in only one research site [3, 4]. Hence, there appears a need to examine the associations between EMS, mindfulness and psychological flexibility in another university sample.

*Aim:* The current study aimed to extend the previous work by investigating the relationships between EMS, mindfulness and psychological flexibility in an undergraduate sample.

*Method:* The sample was composed of 418 undergraduate students at Dokuz Eylül University in Izmir, Turkey, who completed Young Schema Questionnaire-Short Form-3, Mindful Attention Awareness Scale and Acceptance and Action Questionnaire-II.

*Results:* Correlational analyses demonstrated that all fourteen subscales of EMS and five EMS domains were negatively and significantly correlated with mindfulness (ranging from -.14 to -.53,  $p < .01$ ) and positively associated with psychological inflexibility (ranging from .14 to .65,  $p < .01$ ). In other words, it seems that as scores in EMS increase, likelihood of being mindful and psychologically flexible decrease. Moreover, MANOVA analyses were conducted to compare EMS scores of individuals low/high scorers in mindfulness and psychological flexibility. The findings revealed that those higher in mindfulness and psychological flexibility showed lower scores of both fourteen EMS and five EMS domains as compared to participants lower in mindfulness and psychological flexibility.

*Conclusions:* Consistent results between all subscales and dimensions of EMS, mindfulness and flexibility appear to provide preliminary but promising evidences in a university sample. These findings may contribute to recent discussions on whether mindfulness-based assessment and interventions could be used to eliminate the impact of early maladaptive schemas in counseling and psychotherapy. Practitioners may benefit from these findings when working with clients having some indicators of EMS by integrating these techniques.



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## Personal Growth in the Transition to Compulsory Military Service: A Longitudinal Study of the Role of Resources, Cognitive Appraisal and Stress

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**Keywords:** personal growth, coping flexibility, emotion regulation, cognitive appraisal, stress

*Background:* The stressful transition to compulsory military service at the age of 18, presents unique challenges for Israeli adolescents. Thus far, studies examining this transition have focused on its negative possible outcomes, such as maladjustment and attrition. Yet, Positive Psychology encourages the examination of both personal strengths and positive outcomes.

*Aim:* The current prospective longitudinal study aimed at examining personal growth (PG) following the transition to military service, and the contribution of a set of personal and interpersonal resources. In addition, we examined the mediating role cognitive appraisal of the transition, and the moderating role that stress the recruits experience may play in the association between the resources and PG.

*Method:* At Time 1, one month before recruitment, 506 candidates for military service (306 women, 200 men), completed self-report questionnaires: PACT [1]; ERQ [2]; Motivation for Army Service Scale [3]; MSPSS [4]; Cognitive Assessment Questionnaire [5]; PSS [6], and demographic information. At Time 2, six months after recruitment, 401 soldiers (response rate of 79.2%) completed: The Motivation for Military Service Scale [3]; MSPSS [4]; Cognitive Assessment Questionnaire [5]; PSS [6] and PTGI-SF [7].

*Results:* Coping flexibility, re-appraisal in emotion regulation, social support at both measurement waves, motivation at both measurement waves, and the cognitive appraisal of challenge were positively correlated with PG, and stress at Time 2 was negatively correlated with PG; out of the situational variables measured in both waves, stress and social support demonstrated significant increase. Concerning the dimensions of cognitive appraisal, whereas the perception of the military service as a threat showed significant increase, the perception of challenge and efficacy significantly decreased; stress at time 2 moderated the association between expression suppression in emotion regulation and PG; cognitive appraisal mediated the association between coping flexibility and PG.

*Conclusions:* The findings demonstrate the increase in the levels of stress the recruits experience in the transition to military service, and the impairment in the different dimensions of the cognitive appraisal. Moreover, the study sheds light, for the first time, on the possibility of PG following the transition to military service. Its findings strengthen the body of existing evidence regarding the complexity of the associations between personal resources and PG, and suggest that personal resources on their own may not be sufficient for experiencing PG in stressful situations. As shown in a series of studies, the existing preparatory programs for recruitment in Israel are limited in their ability to prevent adjustment difficulties [8]. Therefore, the current findings may be used to develop more effective preparatory programs for coping with the specific stress this life transition generates, and encourage PG.

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## The Influence of Time Perspective on Hedonic and Eudaimonic Motives Across Cultural Tightness and Looseness in Africa

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**Keywords:** time perspective, culture, hedonia, eudaimonia, motives for action, Africa

*Background:* Recent positive psychology literature has proposed the notion of balanced time perspective as the most positively effecting psychological time orientation on well-being and optimal functioning. Missing in the relationship between time perspective and well-being are three aspects, which are the focus of the present study, namely, the role of cultural norm conformity and sanction; the geographical context and heritage of Africa; and well-being as an orientation distinguished between hedonic orientation and eudaimonic orientation.

*Aim:* The present study aimed to explore the culturally embedded influence of time perspective on hedonic and eudaimonic motives for action.

*Method:* A cross-sectional survey design study with participants (N=744) from two African countries (Kenya, n= 371; Ghana, n=373) were selected. Data analysis involved, first, determining the construct validity of the HEMA and the five independent time perspective dimensions of the ZTPI using confirmatory factor analysis. Secondly, the six items of the CTL measure were subjected to latent class analysis to create a latent class moderator variable. Multiple-group moderation SEM was applied to test whether perceived cultural tightness-looseness would distinguish levels of time perspective dimensions as well as the strength of their direct effects on hedonic and eudaimonic motives of action.

*Results:* In the whole sample, hedonic orientation is positively influenced by present fatalistic, present hedonistic and past positive time perspectives, while eudaimonic orientation is negatively associated with present fatalistic, but is positively influenced by future, present hedonistic, and past positive time perspectives. Latent class analysis yielded two classes, “perceived cultural tightness” (62.5%) and “perceived cultural looseness” (37.5%), which were significantly distinguishable on all six CTL items. They also significantly differed on all the time perspective dimensions except for past negative which showed no difference. Comparison of the direct effects between time perspective and well-being motives was preceded by measurement invariance testing of the HEMA which achieved metric invariance. None of the direct effect pathways were found to be significantly different across the two groups. However, the influence of present fatalistic time perspective on hedonic orientation was significant only in the perceived cultural tightness group, and past positive time perspective’s influence on eudaimonic orientation was only significant in the perceived cultural looseness group.

*Conclusions:* Contrary to previous studies, in the present African study, culture did not moderate the relationship between time perspective and well-being. The importance of this finding is anchored by the cultural index variable, as social norm conformity, and conceptualization of well-being as an orientation. More importantly is the observation of how temporal orientations influence motives for action which has implications for the promotion of positive functioning in Africa.

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## Building personal resilience for staff working in the NHS

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**Keywords:** resilience, staff engagement, organization development

*Background:* Following the NHS Chief Executives Innovation Review [1] and the furore surrounding Mid Staffordshire NHS Trust, all NHS staff are now required to learn and apply, Quality Improvement (QI) tools and techniques in their work. The Berwick report [2] called for NHS organisations to ensure they build capacity and capability of frontline staff in QI. Furthermore, the Kings Fund report [3] makes the unequivocal case for such programmes. The report argues that the NHS cannot meet the health care needs of the population without a sustained and comprehensive commitment to QI as its principal strategy. This programme has been devised to build personal and professional capability and resilience of NHS staff.

*Aim:* To create a social movement within NHS organisations, empowering staff to make local improvements, build resilience and support staff-led culture change.

*Method:* Staff are invited to join the four-day Programme. They commit to attend all workshops (over four months) with additional coaching and support offered in between. Staff learn about QI tools and techniques and put this knowledge into practice– ‘action learning’. This is not limited to using an established improvement methodology but includes mind-set and behaviour change skills too. Each participating organization is encouraged to train 10% of its staff to create a ‘tipping point’ and typically runs four cohorts per year with approximately 30 places available on each cohort. Throughout the Programme, staff are encouraged to create a Community of Practice – supporting each other and holding each other to account for agreed actions.

*Results:* The chart in Fig 1. is an example of the return on investment- staff are not just passive recipients of a training programme – they are able to actually apply this in practice. The chart shows the spread of self-assessed scores for each module, before and after the training. The ‘crosshair’ of each box shows the average cohort score for the relevant module. It is the sense of improved morale and resilience however, that really pays dividends – staff have overwhelmingly expressed their gratitude for the opportunity to take part in the Programme – feeling re-engaged and valued by their organisation.

*Conclusions:* This programme builds staff resilience, improves staff engagement and patient outcomes.

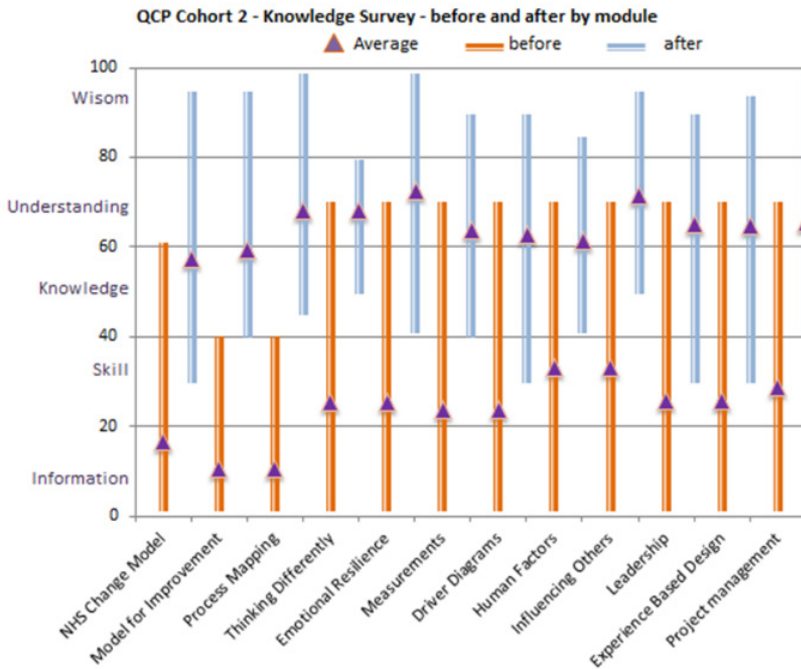


Figure 1.

### Acknowledgments

Staff in all participating organisations

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## Building Bridges: Technology-Enabled Mental Health and Well-being

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**Keywords:** practice, technology-enabled PPI, design, interdisciplinary

*Background:* Along with Positive Psychology (PP), the Human Computer Interaction (HCI) field is also interested in promoting mental health and wellbeing [2]. However, there is no *systematic* understanding in either field of how to translate underlying mechanisms of PP interventions (PPIs) [1] into various technology design choices. Further, moving technology-enabled interventions from controlled studies into everyday life creates new evaluation challenges, e.g., the impact of individual design decisions and of context on effectiveness. We argue for stronger research bridges between our fields that can advance both technology and intervention design.

*Aim:* The broader aim is to open up a dialogue with PP researchers/practitioners and to ground this in two examples. One example illustrates a process for abstracting a conceptual framework that links to both theory and technology design. This is about social emotional skills learning (SEL) [4] and a bridging conceptual framework called the ‘reflective practicum’ [5]. The second example illustrates new possibilities for delivering PPIs. In a current project to support technology-enabled mental health for young people (TEAM), we explore a) how to exploit modalities beyond text/speech for PPIs, to reach youth regardless of language and b) how to create a technology toolkit of such PPIs with evidence-based components, to address challenges of engagement and hedonic adaptation [3].

*Method:* The case studies are undertaken within an HCI tradition as iterative reflective engagements with experts and users, going from design through formative evaluations.

*Results:* The results will reflect on the underlying psychological motivations, key design decisions, and lessons learnt to date including open questions.

*Conclusions:* Technology has the potential to make PPIs available at scale but it is a non-trivial matter to design good technology-enabled PPIs that are delivering to the underlying psychological mechanisms and fitting into people’s lives. Collaboration is key.

### Acknowledgments

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## Language as Potential Space: Exploring Language Use as Manifestation of Leadership Anxiety Dynamics

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**Keywords:** colliquation, leadership attack, persecutory objects, potential space, transitional phenomena

*Background:* Leaders are under increasing “attack” by their superiors, their peers and their followers, which poses a direct threat to their psychological safety. This threat is enhanced by leaders bringing unconscious data into their personal and working relationships. Some of this unconscious material is communicated through language use. Language use can manifest as the carrier of conscious messages (between sender and receiver), but also through the unconscious role of language, to attack – accessing the dark side of language use – to defend against anxieties, and to mask leadership vulnerabilities. There is, therefore, nothing arbitrary, or coincidental about language use. Language use serves conscious and unconscious purposes, because leaders always *do* things through language.

*Aim:* In the face of increasing uncertainty, ever-increasing levels of anxiety, and torrential organisational turbulence, leaders and followers become persecutory objects of each other. Hence, the purpose of this study was to explore language use as manifestation of leadership anxiety dynamics.

*Method:* A qualitative and descriptive research design was selected. Hermeneutic phenomenology, using the systems psychodynamic perspective allowed for the description, analysis and interpretation of the leadership anxiety experiences of participants. Data were collected through a purposive, convenient sample in the form of a listening post comprising systems psychodynamic practitioners. Data were analysed by means of systems psychodynamically informed discourse analysis.

*Findings:* Manifesting themes were language of titles, language as potential space, and the language of silence (versus non-silence). Language has inherent potential for pain, shame and attack, but also for authorisation, recognition and self-esteem. In our complex world of objects and people, language has the positive potential to become the object and space for self-construction and identity formation and to turn object relations into social relations by integrating part objects into whole (personal) objects.

*Conclusion:* Since leaders operate in a colliquated space (collisions), both on the individual and systemic level, leadership anxiety could be elevated, resulting in the access of the dark side of language use. However, leadership anxiety could be reduced, were the leader to harness the transitional space by accessing the relational value of language.

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## Understanding the Role of Affect, Emotion Regulation, and Challenges and Skills on Adolescents' Daily Flow Experience

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**Keywords:** flow, adolescents, positive and negative affect, emotion regulation strategies, Experience Sampling Method

*Background:* Flow is an optimal experience in adolescents' lives. When it occurs individuals feel deeply involved, cognitively efficient, highly motivated and happy [1]. One of the main key conditions for the flow experience to occur is the balance between high challenges and high skills, showing the important role of this experience in connecting the individual and the task at hand [2]. But, if the characteristics of the flow experience have been greatly investigated, a smaller emphasis is actually given to the study of its predictors, concretely in terms of the role of affect and emotion regulation [3]. Concerning affect, literature consistently shows that flow and positive affect are greatly associated; on the contrary, and supported in fewer studies, this relation tends to be negative when considering flow experience and negative affect [4]. As for emotion regulation it seems that using emotion control, as a strategy, is positively associated with flow [5]. Two main strategies had receiving great attention, namely cognitive reappraisal and expressive suppression [6], but knowing how these two strategies are associated with flow experience is still an issue under research.

*Aim:* The aim of this study is to analyze the relationships between affect (positive and negative), the use of emotion regulation strategies (cognitive reappraisal and expressive suppression), and perceived levels of challenges and skills, with the intensity of flow experience in a sample of adolescents. Specifically, we were interested in understanding how flow experience was influenced by these variables along a week life.

*Method:* This study used the Experience Sampling Method [7], a real-time measure to assess daily experience, which allowed for a repeated measure of different momentary variables along one week of participants' lives. The sample consisted of 110 Portuguese adolescents (14 to 19 years; 72% female), and of 3901 momentary assessments. Since the data has a hierarchical structure (multiple observations are nested within individuals), multilevel modeling was performed.

*Results:* The results showed that a higher use of momentary expressive suppression strategy decreased the intensity of flow experience, while the use of momentary cognitive reappraisal had no significant effect. Momentary positive and negative affect had a different impact on flow experience intensity: while positive affect increased flow, negative affect decreased it. Additionally, a perception of higher challenges and higher skills in the activity at hand was associated with an increase in the intensity of flow.

*Conclusions:* The present study corroborates flow literature by showing that perceiving high challenges and high skills in the task influence positively flow experience. It also presents some innovative results concerning the affective and self-regulation dimensions of ado-

lescents' daily experience. Specifically, the findings highlight the significant impact of positive and negative affect, and expressive suppression strategy on how adolescents experience flow. Interestingly, experiencing negative affect and using expressive suppression seems to have a detrimental effect on adolescents' flow experience. These findings should be more investigated in future research, in order to replicate these results and to explore the role of other emotion regulation strategies on adolescents' daily flow experience.

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## **A Flourishing System for the Workplace: Making Happiness Part of The Business Strategy**

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**Keywords:** happiness in the workplace, business with compassion, servant leadership

*Background:* Hospital Anchieta has been dedicated to the establishment of a quality control framework, as well as a culture focused on patient safety. It was certified by ISO (International Federation for Standardization) in 2000 and by ONA (Brazilian National Organization for Accreditation of Health Care Services / Brazilian Health Ministry), in its highest level (3), in 2006. For over more than ten years the hospital has been a national benchmark in quality control for health care facilities. In 2016, during the 2022 Strategic Plan review, the board of directors realized that given the maturity of its quality control system and also the fact that security should be a non-negotiable factor in any health care structure, it was time to take a new step towards the business evolution. For that they took in consideration the so-called Triple Aim, a framework developed by the Institute for Healthcare Improvement that describes an approach to optimizing health system performance. After analyzing the Triple Aim and market opportunities they elected the goal of providing a better experience of care for all patients. It was at that point that Feliciencia Institute was invited to present a project to support the development of the new strategy. Given the nature of the Institute - whose focus is human and organizational flourishing through the promotion of happiness, based on Positive Psychology, Neuroscience and Gross National Happiness (GNH) - the employees well-being was established as a priority for delivering a better experience of care for the patient.

*Aim:* This paper introduces an empirical system developed to bring happiness to the centre of business strategies. The system was tested in a Brazilian private hospital, located in Brasilia, the country's capital. It aims to disseminate a framework that has already shown positive results in both employees' well-being and business performance.

*Method:* The system was based on the GNH Framework and took into account the four pillars and nine domains of the Bhutanese model, considered by the United Nations (UN) the New Economic Paradigm. Measurement tools were established to check the status of the organization at the beginning of the project. The first and most important step was the adaptation of the Gross National Happiness survey to business and cultural specificities. The survey aimed to measure the Corporate GNH Index in order to guide the actions to be implemented in support of the new strategy. An extensive education for happiness program was designed to support the development of a culture centered on employees' well-being and the new strategy. Based on the Corporate GNH Index, it was designed a Comprehensive Happiness Program, with special emphasis on Positive Psychology interventions. In order to verify the Program's systemic impact, the following Indicators were chosen: Absenteeism, Turn Over, Organizational Climate, Internal Customer Satisfaction, External Customer Satisfaction, Net Promoter Score (NPS) and Rentability.

*Results:* The system was established in January 2017. No expressive results were being expected before the end of the first year, though all Indicators - except for GNH Index - were being checked on a regular basis. At the end of the first semester important KPIs reached figures above the average: Internal Customer Satisfaction, External Customer Satisfaction, Net Promoter Score (Inpatient) and Net Promoter Score (Emergency Unit). It was also observed an increment in Rentability of 12,5%.

*Conclusions:* Business strategies should take into account people centricity instead of customer centricity, considering that promoting employees' happiness should be prior to improving customer experience. Employees' well-being can be decisive to competitiveness.

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## “Where for Art Thou?” – The Role of Attachment to God in Couples’ Adjustment to the Threat of Breast Cancer

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**Keywords:** spirituality, attachment, coping, couples, breast cancer

*Background:* It is proposed that an attachment to God develops in a similar manner as parental attachments and so can be secure or insecure in nature [1]. According to the *correspondence* hypothesis, an attachment to God mirrors significant parental attachments [2]. Conversely, in dire childhood circumstances (i.e., lack of parental security), an attachment to God may develop as a *compensatory* mechanism that provides a sense of comfort and security [3]. Thus, attachment to God may serve as a compensatory relational support at stressful times when other significant attachments may be less available [4].

*Aim:* Since the stress associated with the threat of breast cancer may de-stabilize the attachment security of women and their partners within the couple relationship, it is critical to identify supports that will help mitigate such effects. The present study explored the role of attachment to God in couples’ adjustment to the threat of breast cancer.

*Method:*

*Sample.* Women were recruited at a breast health clinic in a Canadian city while they awaited their biopsy procedure. Of the 327 women approached, 277 agreed to participate in a larger longitudinal study on spirituality and adjustment to breast cancer. Of these 277 participants, 86 women had partners (84 men, 2 women) who were interested in participating. The mean ages of women and their partners was 53.5 and 58.1 years, respectively. The majority of women (70.6%) and their partners (62%) were of a Christian faith.

*Procedure.* Women and their partners separately completed measures of anxious and avoidant adult (*ECR-R – Experience in Close Relationships-Revised*) and God attachment (*AGI – Attachment to God Inventory*), interpersonal coping (*RFC – Relationship-focused Coping*) and marital adjustment (*RDAS – Revised Dyadic Adjustment Scale*) over the phone within 2-4 days post-biopsy and prior to the women receiving a diagnosis.

*Data Analysis.* To test the correspondence hypothesis, Pearson correlations were examined to determine the degree and pattern of relationships between an individual’s attachment to God and his or her adult attachment, use of empathic coping, and degree of marital adjustment. Hierarchical multiple regressions were used to investigate the possible moderating role of attachment to God in the relationship between adult attachment and empathic coping and between adult attachment and marital adjustment, respectively. Adult attachment and attachment to God were entered in the first step and the interaction between adult attachment and attachment to God were entered in the second step as predictors of empathic coping and marital adjustment separately. All regression analyses were conducted for women and partners separately.

*Results:* In relation to the *correspondence hypothesis*, first, it was found that women who experience a more anxious attachment to God report a more anxious and a more avoidant adult attachment. Further, women who experience a more avoidant attachment to God report a more anxious adult attachment. In contrast, partners' attachment to God was not related to their adult attachment styles. Secondly, whereas women's anxious and avoidant adult attachment styles were associated with a lesser use of empathic coping and poorer marital adjustment, their attachment to God was not related to these measures of adjustment. In contrast, for partners, an avoidant adult attachment style and an avoidant attachment to God demonstrated similar associations with poorer marital adjustment. The compensatory hypothesis was supported as a secure attachment to God was found to buffer the effects of an anxious adult attachment on the use of empathic coping for women and their partners. In contrast, an avoidant attachment to God potentially undermined the effects of a secure adult attachment on the use of empathic coping for women while it was directly related to poorer adjustment for partners – further support for the correspondence hypothesis.

*Conclusions:* Findings provided support for both the correspondence and compensatory hypotheses on the role of attachment to God in adjustment to the threat of breast cancer with results depending on the individual assessed (woman or partner) and the nature (anxious, avoidant) of the attachment to God. These results underscore the need to attend to the nature of the spiritual attachment of women and their partners as they undergo the diagnostic phase of breast cancer as attachment to God can have implications for each spouse's ability to remain empathic and satisfied in their couple relationship at this time of heightened stress.

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## **Well-Being Assessment: Re-examining the Reliability, Validity, and Usefulness for Intervention Studies of the Authentic Happiness Inventory**

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**Keywords:** Authentic Happiness Inventory, well-being, assessment, positive psychology interventions, validity

*Background:* The Authentic Happiness Inventory (AHI) [1] has often been used for the subjective assessment of well-being and is primarily used for evaluating positive psychology intervention studies [e.g., 2, 3]. It has been suggested that it is sensitive to detect subtle changes in well-being and differentiate among very high levels of well-being. However, this has not been explicitly tested yet [1].

*Aim:* The present study aimed at examining the stability, and factorial, convergent, and discriminant validity of the AHI. For this purpose, we designed a series of four studies (total  $N = 5,166$ ).

*Method:* Study 1 examines four independently collected samples examining the AHIs factorial, convergent, and discriminant validity. Study 2 studies test-retest correlations over a period of one week, and one, three and six months, and examines whether the AHI is predictive for positive life events. In Study 3, the AHI was used together with the Satisfaction with Life Scale (SWLS) in a positive psychology intervention study by testing two well-established positive psychology interventions (i.e., “another door opens”, and “three good things”) against a placebo control group.

*Results:* Results show that the AHI shows acceptable factorial validity and good convergent and discriminant validity. Further, we find that the AHI is highly stable, but is also predictive for positive life events. Finally, results showed that the AHI reflects the expected changes in well-being in an intervention study (i.e., increase in the intervention in comparison with the placebo-control group) better than other measures, such as the SWLS.

*Conclusions:* Overall, the three studies support the notion that the AHI has good psychometric properties and provides support for its validity. Potential further applications of the measure are discussed.

### **Acknowledgments**

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## Well-Being Coaching Training: Character, Resilience and Well-Being

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**Keywords:** well-being training, character, coaching, personality

*Background:* The level of stress in the 21<sup>st</sup> century is increasing the risk for lifestyle and stress-related illness in all populations, including health care professionals who have the double burden of their personal problems and those of their patients. Between 2009 and 2014, psychiatric diagnoses, including burnout, have doubled in health care populations like nurses, doctors, and psychotherapists [1]. In order to help others, health care professionals have the need of a variety of tools and approaches to work on their own resilience, health, and well-being. The Anthropedia Foundation in collaboration with the Center for Well-Being at Washington University in St. Louis developed a specialized training that is person-centered, interdisciplinary, and biopsychosocial in orientation. This training can be integrated into existing professions or used independently. The training program has been designed to increase three character dimensions (self-directedness, cooperativeness, and self-transcendence) that have been shown to lead to increases in physical and mental health, resilience, and overall well-being [2-4].

*Aim:* The purpose of this study was to investigate whether well-being training was effective in increasing character scores in the training participants.

*Method:* 50 trainees were given the Positive and Negative Affect Schedule, the Satisfaction with Life Scale, and the Temperament and Character Inventory before and after the one-year training. Paired t-tests were performed to examine significant differences.

*Results:* Analyses showed significant differences in the Temperament and Character Inventory subscales of self-acceptance ( $t = 2.2$ ,  $df = 49$ ,  $p < .05$ , *Cohen's D* = 0.77), empathy ( $t = 2.6$ ,  $df = 49$ ,  $p < .05$ , *Cohen's D* = 0.90), moral reasoning ( $t = 3.17$ ,  $df = 49$ ,  $p < .01$ , *Cohen's D* = 1.11), and the scale of self-transcendence ( $t = 2.98$ ,  $df = 49$ ,  $p < .01$ , *Cohen's D* = 1.04). There was a marginal increase in positive emotions ( $t = 1.18$ ,  $df = 49$ ,  $p < .05$ ) and life satisfaction ( $t = 1.57$ ,  $df = 49$ ,  $p < .05$ ), and a marginal decrease in negative emotions ( $t = 1.26$ ,  $df = 49$ ,  $p < .05$ ).

*Conclusions:* Results suggest that the training methodology increased subjective well-being, as well as self-directedness (self-acceptance), cooperativeness (empathy and moral reasoning), and self-transcendence. Cross-cultural studies on these character dimensions have demonstrated strong relationships between increases in character development and perceived social support, perceived health, and resilience [2-4]. In other words, the well-being coach-

ing training increases sustainable global health, resilience and psychological well-being, and not simply hedonic well-being. The coaching is more intensive since it is one-on-one, thus we expect the effect on subjective well-being and character to be even greater for coachees.

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## Character and Subjective Well-Being among Swedish Priests

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**Keywords:** character, personality, resilience, Swedish priests, well-being

*Background:* Helping professionals have a working environment characterized by time pressure, unexpected challenges, and emotional issues [1]. According to statistics from The Swedish Social Insurance Agency, priests run a greater risk of being ill and burning out, which might impede their care for others due to stress and mental fatigue. Previous research by Cloninger and colleagues [2-4] indicates that character maturity (i.e., high self-directedness, high cooperativeness and high self-transcendence) contributes to both resilience and well-being, because these aspects influence human experiences in different life domains, in turn, facilitating the basis and extent of positive human development (see also [5]).

*Aim:* Our aim was to first compare Swedish priests to the general population, with regard to character traits, and then to investigate the relationship between character and both resilience and subjective well-being within the priest population.

*Method:* 515 Swedish priests (267 females, 246 males, 2 unreported) self-reported personality (Temperament and Character Inventory), resilience (Connor–Davidson Resilience Scale), and subjective well-being (Satisfaction with Life Scale, Positive Affect Negative Affect Schedule, and Harmony in Life scale). Character traits *Percentiles* were computed using the Swedish norms. The relationship between priests' character and self-reported resilience and well-being was investigated by first clustering priests according to all possible combinations of high (self-directedness: S, cooperativeness: C and self-transcendence: T) and low (self-directedness: s, cooperativeness: c and self-transcendence: t) scores in the character traits, which generated eight different profiles. Secondly, we conducted paired *t*-tests to compare resilience and well-being between profiles that differed in one character trait, while controlling for the other two.

*Results:* As a group, the priests had a character profile high-average in self-directedness (*percentile* = 62.3), high in cooperativeness (*percentile* = 75.5) and very high in self-transcendence (*percentile* = 88.4). However, there was substantial variation in character profiles within the priest population (e.g., 21% SCT “creative”, 19.2% sct downcast, 11.5% Sct “authoritarian”, 10.3% SCT “organized”, and 9.3% ScT “absolutist”). Moreover, independent of any combination, self-directedness had a direct positive relationship to resilience and

all well-being measures. Nevertheless, both cooperativeness and self-transcendence were related to resilience and well-being in certain conditions, but not in others. For example, cooperativeness was negatively related to negative affect when self-directedness and self-transcendence was high, but positively related to negative affect when both were low.

*Conclusions:* Swedish priests, as a group, seem to have a "creative" character profile, which means they are personally organized and also self-transcendent. The large variation in the group suggests, however, a heterogeneity that might have important implications for their institutional roles, and their needs. In addition, self-directedness, the character trait in which the priests scored the lowest, was the trait of greatest importance for their resilience and well-being. Finally, the relationship between cooperativeness and self-transcendence to both resilience and well-being depended on its coherence to the other two character traits.

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## The Cognitive Structure of the Concept of Hope

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**Keywords:** hope, emotional concepts, cognitive structure, affective verbal fluency, semantic networks

*Background:* Psychological literature indicates that hope is a positive feeling playing the fundamental motivational role in the regulation of human behavior. The cognitive-structural theory of the emotion of hope points that hope is a prospective emotion which, on the contrary of fear, is directed towards the future [1]. Hope has been defined as „multicomponent cognitive structure which contains as fundamental the belief that a human will achieve a good in the future (reach the goal) with an appropriate degree of certainty or probability” [2]. The structure of hope comprises opinions, emotions, thought about the future, motives, and sense of agency.

*Aim:* The aim of the study was to describe the semantic network of words related to hope and to identify the components of the structure of the concept of hope basing the linguistic material. The aim is to describe how lay people perceive hope and to show the lay concept of hope.

*Method:* 112 participants (group balanced in sex) aged between 19 to 50 years old performed the affective verbal fluency tasks. The level of intelligence has been controlled (the subscale Vocabulary from the WAIS-R). Participants were asked to name as many words in a minute as possible from the categories: *happiness, joy, satisfaction, hope* [3]. All generated words by participants have been analyzed. The semantic clusters (semantic relations between words) has been identified, then, these clusters have been used in the statistical analyses.

*Results:* A hierarchical cluster analysis using the squared-Euclidean distance was conducted in this study which led to identifying two main clusters. They are labeled as cognitive and affective components. The affective component comprises emotions, internal causes (including values), and external causes (including the focus of attention on the other people). The cognitive component has been more extended, it comprises concentration on the self, positive evaluation of hope, cognitive aspects as thoughts/imaginings, temporal short-term perspective, temporal long-term perspective, and intentionality. And additionally, one independent cluster has been identified which was called the negative evaluation of hope. This cluster comprises words indicating absurdity of expectancies, such as *silliness, unreality, illusion, naivety*. The negative evaluation of hope correlated with level of sadness/negative mood ( $r = .30, p < .01, r^2 = .09$ ); as higher sadness as higher negative evaluation of the hope.

*Conclusions:* The results confirmed that the concept of hope is multicomponent containing two main elements: emotional and cognitive. They showed that language of lay people reflects the crucial components of their concept of hope. This lay concept of hope is partly congruent with the scientific theories such as by Snyder, Fredrickson, or Krafft [4].

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## Pathways to Adolescents' Well-being: Optimistic Attributional Style as Mediator of the Effect of Basic Psychological Needs

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**Keywords:** optimistic attributional style, basic psychological needs, well-being, adolescents

*Background:* What are the sources of adolescents well-being? Self-determination theory (SDT; Deci & Ryan, 1985, 2002; Ryan & Deci, 2000, 2017) suggests that, to the extent that social contexts support a person's basic psychological needs for autonomy, competence, and relatedness, they facilitate greater well-being. Parents facilitate or hinder the children's well-being through their responsiveness to children's basic psychological needs. Findings from decades of research also suggest that an optimistic attributional style is a protective factor against depression (Hu et al., 2015, Peterson & Park, 2007), is positively related to well-being in adolescents (e.g., Rigby & Huebner, 2003), and is associated with having parents who are supportive and nonrestrictive (Peterson & Bossio, 1991).

*Aim:* The present study used a cross-sectional design to evaluate models investigating reported basic psychological needs satisfaction in family, and adolescents' optimistic attributional style, academic achievement, perseverance and well-being. It was hypothesized the effect of a perceived autonomy supportive, warm, and respectful family environment would influence current well-being, and that these effects would be partially mediated by optimistic attributional style.

*Method:* A sample of 223 adolescents (8<sup>th</sup> graders, 4 schools) was assessed. Basic psychological needs satisfaction in family was measured by BPN-Family questionnaire (Gordeeva et al., 2018),  $72 < \alpha < .80$ ). A short version of CASQ (Thompson et al., 1998) was used to measure attributional style related to positive and negative life events (for both subscales tetrachoric  $\alpha = .66$ ). To measure well-being Multidimensional Students' Life Satisfaction Scale (Huebner, 1994; composite for Family, Friends, and Self subscales, Cronbach's  $\alpha = .86$ ) and Competence-based Self-Esteem Scale were used.

*Results:* Using structural equation modeling, we examined the role of attributional style for positive and negative events as partial mediator of the effect of basic psychological needs (composite) on well-being and healthy self-esteem. The model fitted the data very well with CFI = 0,996; NNFI = 0,992; RMSEA = 0,027; 90% CI for RMSEA: 0,000-0,069; PCLOSE = 0,780;  $\chi^2 = 19,676$ ;  $df = 17$ ;  $p = 0,291$ . Also in the model optimistic attributional style for both positive events and negative events predicted well-being, competence-based self-esteem, perseverance and academic performance (GPA).

*Conclusions:* As predicted, research findings suggest that perceived parental autonomy support, respect and warmth are positively related to the emotional and social well-being in

adolescents and this link is partially mediated by the capacity to think optimistically about positive and negative events that happen in life. Findings are discussed from the two theoretical perspectives – SDT and reformulated learned helplessness model. Practical implications on how to enhance adolescents' optimistic thinking will be also discussed.

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## **TinyTasks at Work: Improving Work Engagement and Performance using Behavioral Intervention Technology**

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**Keywords:** work engagement, affect, job crafting, performance, behavioral intervention technology (BIT)

*Background:* Employees' work engagement and proactive work behavior has become crucial for companies to maintain competitive in the market. To date, few interventions have been developed that aim to increase proactive work behavior. Building on job demands-resources theory [1] we postulate that proactive work behavior can be stimulated through increasing positive affect and work engagement. A recently developed Behavioral Intervention Technology called "TinyTasks" has proven effective in enhancing happiness in the general population [2]. TinyTasks are a coherent set of happiness enhancing activities printed on colorful key ring coins. Examples are: "'Plan a date' with someone you haven't seen for a long time" (Social task) or "'New way home', find a new way to go home from work" (Personal task). Because the happiness enhancing tasks are performed in the work context and resemble job crafting activities, they were expected to stimulate affective motivational states and proactive work behavior, in specific job crafting. We also hypothesized indirect positive relationships with employee performance (see Figure 1).

*Aim:* This intervention study tested whether the TinyTask intervention can be used to stimulate employee job crafting (seeking challenges and social support), positive affect, and work engagement, and whether this, in turn, predicts employee performance.

*Method:* In total, 126 office employees participated (response rate = 31.5%; mean age 40.63 (sd = 11.13), 52% men). During a two-week TinyTask event, 43 people performed social tasks; 33 people personal tasks and 50 people (control group) did no tasks. Participants filled in questionnaires before and after the event. Variables were measured using pre-existing scales (Cronbach's alphas between .72 and .96; answers ranged from 1 "very low" to 5 "very high"). The variables "performed TinyTasks" and "TinyTasks type" (Personal) were coded 0 = no; 1 = yes.

*Results:* Compared to the control group, the group who had performed social or personal TinyTasks maintained higher levels of work engagement and positive affect during the event. The group performing Social TinyTasks also showed higher levels of challenge crafting after the event as compared to the other groups whose levels had decreased. Unexpectedly, seeking social support had increased most in the control group, to a lesser extend in the Personal Tiny Task condition, and not in the Social TinyTask condition. In turn, in-role performance was predicted by T1 challenge crafting and performing Personal TinyTasks. Extra-role performance was positively predicted by T1 and T2 seeking social support.

*Conclusions:* The TinyTask event is a useful behavioral micro-intervention to keep people invigorated at work and stimulate seeking challenge demands, which indirectly improved in-role performance. The event did not stimulate support seeking and extra-role behavior. Future research should investigate long-term effects and more detailed process models.

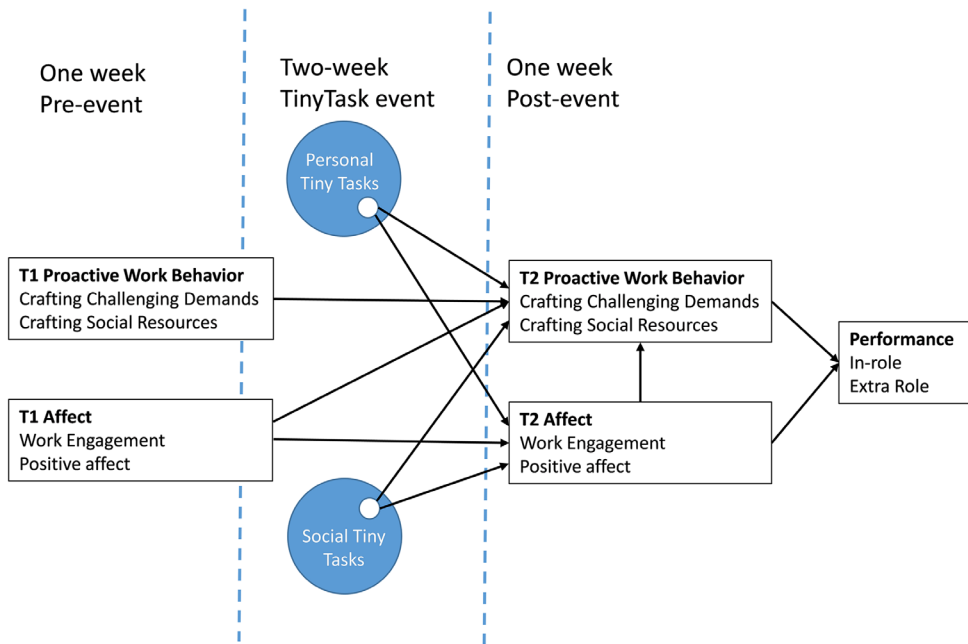


Figure 1. Conceptual Model

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## The Role of Teachers' Character Strengths in Classroom Management

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**Keywords:** character strengths, classroom management, teachers, students, satisfaction

*Background:* Character strengths represent an important research topic in the area of positive psychology. They are defined as positive individual traits that are morally valued. Research on general population samples has shown numerous beneficial outcomes of individuals' knowing their character strengths and using them in their everyday lives. As teachers have an important impact on learning and on personal development of their students, teachers' character strengths were examined in a classroom context.

*Aim:* The aim of the present study was to investigate the relationship between teachers' character strengths and effective classroom management. Moreover, we were examining the contribution of teachers' character strengths to satisfaction of their students. Also, the nature of relationship between teachers' character strengths, classroom management, and students' satisfaction was investigated.

*Method:* The sample consisted of middle school and high school teachers of Slovenian language ( $N = 68$ ) and their students ( $N = 1151$ ,  $M_{\text{age}} = 16.2$  years). Teachers filled in the VIA-IS questionnaire on self-reported character strengths. Instruments for students were developed for the purpose of present study: students reported about their perception of their teachers' character strengths, classroom management and satisfaction with their teachers of Slovenian language. Instruments were administered in a paper-pencil form.

*Results:* Results have shown that teachers with higher endorsement of self-reported character strengths of zest, love, kindness, gratitude, hope, and humour were perceived as better classroom managers by their students. Students showed higher levels of satisfaction with teachers in which they recognized more of transcendence, humanity and knowledge strengths; students also assessed classroom management of teachers with these strengths as more positive. Hierarchical linear modelling (HLM) was used to examine the relationship between teachers' character strengths, classroom management, and students' satisfaction. Both classroom management and teachers' character strengths, as perceived by students, proved as important predictors of student satisfaction.

*Conclusions:* Our study confirmed the importance of teachers' character strengths in the classroom context: they play an important role in effective classroom management, in students' satisfaction and also contribute to student achievement. Therefore, teachers should be encouraged to recognise and develop their character strengths and use them in interactions with their students.

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## Complexity in New Digital Media: Understanding the Role of Context in the Relationship Between Networked Technologies, Well-being, and Ethical Thinking

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**Keywords:** new digital media research, subjective well-being, digital literacy education, digital citizenship

*Background:* Social media use has recently prompted a worldwide moral panic among researchers, educators, parents, technology conglomerates, and policymakers. With the increasing ubiquity of social networking sites (SNS) such as Facebook, Twitter, and Instagram, a growing body of work is exploring the emotional tolls these networked technologies exert on individuals. However, the relationship between SNS use and well-being is complex; at times SNS use has been associated with less prosocial behavior, less fulfilling friendships, and higher levels of negative affect [1, 2, 3] while at others, it has been shown to foster positive interpersonal relationships and provide a useful medium for amplifying civic voices [4, 5]. Thus, the 'how' of SNS use is often neglected when examining its impact. Furthermore, studies are often limited by correlational designs and retrospective memory bias. This talk presents findings of two separate studies employing different methodological approaches – one quantitative, the other qualitative – to underscore the importance of context when designing research to better understand the impact of new digital media on the quality of life.

*Aim:* The aim of this presentation is to underscore the role of context in social media use. Indeed, there is a difference between passive and active forms of SNS use. Considering the complex nature of social life, it is not enough to suggest that higher levels of social media use are correlated with negative outcomes. Rather, to conduct good research, we must account for the many reasons 'why' people use social media, and 'how' they use it. To address this issue, one quantitative study will be briefly highlighted, followed by an in depth discussion of recent advances in research conducted at Harvard Project Zero.

*Method:* In the first study, the Experience Sampling Method (ESM) was used to compare quantity of SNS use across four experiential states defined by flow quadrants: flow, boredom, apathy, and anxiety. Participants ( $N = 65$ ; 56% female;  $M_{\text{age}} = 31.12$ ) were electronically signaled at six random intervals per day for seven days and asked to respond to brief surveys about their subjective momentary experiences. To conduct the analyses, Csikszentmihalyi's (1997) 8-channel flow model was collapsed into four quadrants based on the perceived levels of challenge and skill reported by subjects during the study period. Low and high media users were subsequently compared on overall mood, creativity, meaning, engagement, and energy levels across each experiential quadrant. In the second study, 38 digitally savvy and civically engaged youth (age range 15-25; 58% female) were interviewed to better understand dialogical approaches to online civic issues. In addition to probing for dialogue strategies,

our research team was interested in capturing the moral and ethical thinking patterns of these young people, as well as the various uncertainties they experienced online. Specifically, we asked what they thought about or considered prior to initiating different moves and tactics during difficult civic exchanges. Etic and emic codes were combined to generate the full coding scheme of 22 parent codes and approximately 100 child codes. Reliability was obtained by entering transcripts into *Dedoose*, a qualitative coding program. Top-level codes achieved a base threshold Cohen's Kappa of .70, which was maintained by blind shadow coding of transcripts by four members of the research team.

*Results:* Findings of study 1 revealed that high media users, on average, reported less positive moods, and also reported being significantly less creative and less energetic each day. Further, high media users reported deriving less meaning from daily activities, and were marginally less satisfied with the overall quality of their week than their low media user counterparts. Given that signal level responses were nested by subjects, data were first unpacked using a multilevel model design (MLM). Results of a linear mixed model approach indicated that, controlling for gender, social media use was not a significant predictor of mood, yet creativity, engagement, energy, and meaning were all significantly and positively associated with mood. These findings suggest that the relationship between media use and mood is perhaps non-linear and depends on how social media is used and experienced across specified psychological states. A more nuanced analysis of these outcomes revealed that high media users reported being marginally more creative, engaged, and found more meaning during moments of boredom than their low media-user counterparts, thereby identifying differences in how the two groups used social media. In the second study, we found that young people often express uncertainties and anxieties prior to entering online conversations where points of view differ. However, we also found that these digitally savvy and civically active youth were highly engaged with social media platforms for the purpose of fostering positive change. A deeper probing of these narratives suggests that their considerations of other members in their social networks ranged from individual, to moral and ethical, including educating others, empowering others, and being positive role models, yet crucially, they lacked the needed supports for learning how to deploy moral and ethical thinking strategies.

*Conclusions:* Taken together, the two studies above provide a useful point of departure for discussing a conceptual model of good digital citizenship. Implications of this research will advance future study designs that explore the complex relationships between new digital media, SNS, and well-being by emphasizing the important role of context and complexity in human experience. While some argue that heavy social media use causes higher rates of depression [1], this portrayal is rather glib, especially given that people leverage the unique affordances of diverse media platforms for different ends. Finally, educators and families should consider teaching and modeling media literacy skills to their students and children, because if we can equip modern youth with prosocial toolkits that foster positive online dialogue around points of difference, we might help them generate safe and productive spaces in which individuals can actively manage online platforms for a greater good.

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## Experiencing Flow in Relation to Satisfaction with Life in Elite Musicians and Top Athletes

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**Keywords:** flow, expert performance, elite musicians, top athletes, satisfaction with life

*Background:* Music and sports are among the activities that promote flow very often. Especially in expert performance, this peak state of functioning is a frequent companion. Previous studies on flow and wellbeing reveal that experiencing more intense flow correlates positively with hedonic and eudaimonic well-being. Considering satisfaction with life and flow especially clear goals are important predictors of satisfaction with life. Interestingly, despite the growing body of research regarding flow in musicians and flow in athletes separately, there has been, to our knowledge, no studies up to date, that would compare experiencing flow in top athletes and elite musicians and furthermore investigate its relation to satisfaction with life.

*Aim:* The aim of our study was to explore differences in experiencing flow in top athletes and elite musicians in relation to satisfaction with life and predict satisfaction with life based on flow. Furthermore, we wanted to investigate gender differences and differences regarding performance setting (individual or group performance).

*Method:* 452 subjects, aged from 14 and 58 years ( $M = 23, 46$ ), participated in the study. The sample consisted of 114 elite musicians and 338 top athletes (149 team performers/303 individual performers; 224 male/224 female). We used Dispositional Flow Scale – 2 (DFS-2) [1] and Satisfaction With Life Scale (SWLS) [2].

*Results:* Results show that in four out of nine dimensions of flow, there are significant differences between top athletes and elite musicians; even though the global flow score did not differ significantly. On one hand clear goals and unambiguous feedback were more present in top athletes, on the other hand transformation of time and autotelic experience were more present in elite musicians. Elite musicians also reported higher satisfaction with life than top athletes did. Comparing group and individual elite performers flow was experienced more frequently in team performers. Female elite performers experienced flow more often than male elite performers. Results show that all dimensions of flow in top athletes and elite musicians correlate significantly with satisfactions with life. In top athletes sense of a control, unambiguous feedback and clear goals are the most important predictors of satisfaction with life. However in elite musicians transformation of time and challenge-skill balance are the most important predictors of satisfaction with life.

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## How Positive Practices at Work can Accelerate Transformation to a Lean Improvement Culture and Improve Organizational Effectiveness

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**Keywords:** positive practices, continuous improvement, improvement culture, strengths-based, lean

Organizations striving for operational excellence face new challenges in a world with increasing volatility, uncertainty, complexity, and ambiguity. A way to achieve operational excellence is to pursue a continuous improvement culture such as using *Lean* philosophy to engage and empower employees to continuously optimize resource utilization and thereby increase competitiveness [1]. However, many only get short-term gains and fail with an actual *Lean* transformation and frequently; cultural change is mentioned as the hardest to manage [2]. At all organizational levels, people get under pressure that frequently leads to behavior un-favoring long-term excellence and certainly inhibiting continuous improvement culture. Psychological mechanisms induced by fear and high tempo are possible explanations [3].

This paper investigates how positive practices at work [4] can accelerate transformation to a *Lean* improvement culture and contribute to improved organizational effectiveness.

The study was carried out as an exploratory case study in a company selected due to its experimenting with positive practices and explicit focus on and strategic need for developing a *Lean* improvement culture [5]. The researchers had extensive access to investigate daily practices at a manufacturing plant. First, all improvement practices were mapped and positive practices identified. Second, the improvement practices were analysed to assess their impact on developing improvement culture and differences between traditional improvement practices and the identified positive practices were discussed. Third, the highest impact practices were analysed for how they contributed to organizational effectiveness.

The paper contributes to understanding positive practices applied to organizational effectiveness.

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## **Positive Psychology for Overcoming Symptoms of Depression: A Pilot Study Exploring the Efficacy of a Positive Psychology Self-Help Book Versus a CBT Self-Help Book**

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**Keywords:** positive psychology interventions, bibliotherapy, depression, well-being, and books on prescription

*Background:* Depression is an extremely common mental health disorder, with prevalence rates rising globally. Low-intensity interventions are frequently used to help meet the demand for treatment. Bibliotherapy, for example, is often prescribed via books on prescription schemes (for example ‘Reading Well’ in England) to those with mild-to-moderate symptomatology. Bibliotherapy can effectively reduce symptoms of depression (Naylor et al., 2010). However, the majority of self-help books are based on cognitive behavioural therapy (CBT), which may not be suitable for all patients. Research supports the use of positive psychology (PP) interventions for the reduction of depression symptoms (e.g. Bolier et al., 2013; Sin & Lyubomirsky, 2009) and as such self-help books from this perspective should be empirically tested.

*Aim:* This study aimed to test the efficacy of ‘*Positive Psychology for Overcoming Depression*’ (Akhtar, 2012), a self-help book for depression that is based on the principles of positive psychology, in comparison to ‘*Overcoming Depression: A self-help guide using Cognitive Behavioural Techniques*’ (Gilbert, 2009) a CBT self-help book that is currently prescribed in England as part of the ‘Reading Well’ books on prescription scheme.

*Method:* Participants (N = 115) were recruited via [actionforhappiness.org/](http://actionforhappiness.org/) with an advert on their social media pages. Participants were eligible if they were not receiving treatment for depression, but had symptoms of depression. Each participant was randomly allocated a PP or CBT book, and asked to read them for 8- weeks. Participants received a weekly reminder email for the course of the study, asking them to read one chapter per week. Depression and well-being were measured at baseline, post-test, and one-month follow-up.

*Results:* Results suggest that both groups experienced a reduction in depression and an increase in well-being, with no differences noted between the two books.

*Conclusions:* The current study aimed to empirically test whether PPIs could be effectively delivered via bibliotherapy. Previous research suggested that PP interventions could effectively reduce symptoms of depression and improve well-being (e.g. Bolier et al., 2013; Sin & Lyubomirsky, 2009), with researchers now focused on determining effective ways of disseminating these interventions to patients (Hone et al., 2015). The results of the current pilot study found that both ‘*Positive Psychology for Overcoming Depression*’ (Akhtar, 2012) and ‘*Overcoming Depression: A self-help guide using Cognitive Behavioural Techniques*’ (Gilbert, 2009) reduced symptoms of depression and increased feelings of well-being when delivered over an 8-week intervention period with reminder emails sent weekly. Changes in depression and well-being scores were sustained for one month post-intervention with no dif-

ferences noted between the two books. As a result of this pilot investigation, further research should assess the use of ‘*Positive Psychology for Overcoming Depression*’ (Akhtar, 2012) as a bibliotherapy intervention for depression and well-being. Bibliotherapy may be able to reach those with mild-to-moderate symptomology who may not currently be presenting via traditional routes, or who may not be prioritised for high-intensity interventions due to long waiting lists for treatment. Currently users of bibliotherapy are able to access self-help books in numerous ways, such as privately purchasing self-help books or accessing self-help books via books on prescription schemes. The latter is preferable due to the evidence-based nature of the titles prescribed. One drawback however is the fact that the majority of titles on offer for depression are written from a CBT perspective, offering little choice for those patients who have found that CBT is not a good fit for them. The expansion of these schemes to include other evidence-based titles may be beneficial to health care providers globally in terms of reducing the cost and burden of treating the growing numbers of patients presenting with mild-to-moderate symptoms of depression.

### Acknowledgments

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## The Effects of Strength-Based LEGO® Career Model with LSP and Six Bricks for Taiwanese Students

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**Keywords:** strength-based, career counseling, career hope, LEGO® SERIOUS PLAY®, Six Bricks

*Background:* Adolescents are at the exploration stage of Super's career development theory and Erickson's psychosocial development stage of identity and role confusion. At this point, students could form coherent self-concepts through exploring their career paths and deepening understanding of self and professional identity [1] [2]. Numerous scholars in recent years have suggested that combined use of visual, operational methods and verbal sharing is conducive to achieving deeper and faster career reflection, as well as clearer career goals [3][4][5]

*Aim:* This study adopted strength-based career development counseling [6] as the core counseling strategy to form the "4D" stages of discovery, dream, design, and destiny relating to strengths, integrated the LEGO® SERIOUS PLAY®(LSP) and Six Bricks facilitated methods, and constructed a strength-based LEGO® career model to explore its effect on career hope and the content of change resulting.

*Method:* In this study, 29 Taiwanese college students and 2 graduated students were recruited to participate in a six-hour strength-based LEGO® career workshop. First, the facilitator introduced the four identity statuses proposed by Marcia and invited participants to build DUPLO® career figure(Figure 1) and DUPLO® career scale(Figure 2) with Six Bricks. Next, the participants built different career topics by following the 4D stages with LSP(Figure 3, 4), and finally, they rebuilt their DUPLO® career figure and career position, which were used to evaluate the participants career position and change before and after the counseling, demonstrate real-time change, provide feedback for participants, and deepen positive changes. This study also adopted the Strength and Empowerment Card [7] and Occupation Card (Li & Huang, 2011) as the cue card. Pretest and posttest were conducted using Career Hope Scale. One-way analysis of variance was used to explore the change effects on career hope. Two additional open-ended questions were included in the posttest questionnaire, and content analysis of the responses was performed to explore the contents of change.

*Results:* (a) The participants' scores on career agent and career path exhibited significant immediate effect. (b) The proposed model presented the following positive psychological effects and career hope-building outcomes: Flow ensues after overcoming challenges; connecting with the society for a stronger cohesion; building toward an epiphany that leads to positivity; nourishing strength for a more profound insight; facing fears and accepting the challenges; reigniting passion and establishing an anchor; and broadened thinking leading to a career shift.

*Conclusions:* The model constructed in this study enhances career hope, enriches positive psychological capitals, shortens counseling sessions, and provides an experience that is hard to forget.

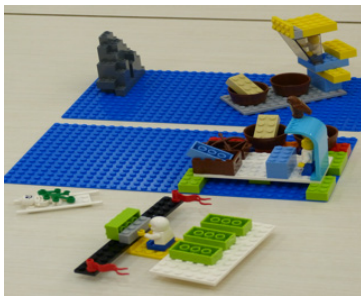
**Figure 1.**



**Figure 1.** DUPLO® career figure representing career identity



**Figure 2.** DUPLO® career scale representing career position



**Figure 3.** Core, others', and aspirational identity



**Figure 4.** Career strengths

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## Conceptualizing Callings Through a Values-based Framework: Classic, Modern and Neoclassic Callings Unpacked

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**Keywords:** calling, meaning of work, values, self-actualization, self-transcendence

*Background:* Work on callings has burgeoned in the past decade, yet recent reviews expose a lack of conceptual clarity and disagreement around its core components and measures. In particular, there are three terms that are frequently used but not clearly distinguished hence generating significant conceptual ambiguity: *Classic, Modern and Neoclassic callings*.

*Aim:* This conceptual papers aims to advance the scholarship in this area by making clear distinctions between *classic, modern and neoclassic callings*. Our aim is to refine the definitions of these concepts, unpack their components, and offer a new theoretical framework for analyzing the experience of people who hold these perceptions.

*Method:* The paper draws on a critical review of the extent literature and a conceptual analysis of each type of calling to demonstrate that *classic, modern and neoclassic callings* involve distinctive mechanisms to the experience of *meaningful work and work meaningfulness*. To facilitate the analysis we use several novel conceptual tools.

*Results:* Our analysis suggests that these concepts share four core features: one feels called to do the work, work is one's life purpose, work intensely meaningful, and central to one's identity. However, they differ in key dimensions: their purpose, motivation, source of calling and social significance. Notably, they draw on contradictory value systems: Classic callings are pro-social and culminate in self-transcendence, modern callings are self-directed and geared toward self-actualization, and neoclassic callings integrate both value systems.

*Conclusions:* Drawing on a comparative analysis, the paper challenges the current theoretical foundation of the construct and offers a novel framework for analyzing people's calling that draws on their values.

## Character Strengths as Predictors of Job Performance Above and Beyond General Mental Abilities and Big Five

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**Keywords:** character strengths, job performance, counterproductive work behavior, incremental validity, general mental abilities

*Background:* Researchers in the field of positive psychology postulate that morally positively valued personal- ity traits – character strengths – help people to flourish and lead them to good and right behavior [1]. The right behavior can be being productive or profitable [2], and therefore, it was hypothesized that the possession of specific character strengths is related to productive or profitable behavior at work (i.e., high job performance). There is first empirical evidence that character strengths are meaningfully related to self- and supervisory rated job performance [e.g., 3, 4]. However, further research is needed to provide strong evidence for the role of character strengths for job performance; there is – to the best of our knowledge – no research investigating the incremental validity of character strengths as predictors of job performance above and beyond general mental abilities and the Big Five (e.g., extraversion, conscientiousness).

*Aim:* Against the backdrop of (a) the existence of meta-analyses showing that general mental abilities best predict job performance and other predictors add little information [e.g., 5, 6] and (b) of being relatively new personality constructs compared to the Big Five, the prime aim of the study was to investigate whether the prediction of job performance could be improved when character strengths are included as predictors in addition to the Big Five or general mental abilities.

*Method:* Employees from various occupational sectors filled in self-rating questionnaires on character strengths and Big Five as well as an intelligence test. Corresponding line managers provided supervisory ratings of employees' job performance (e.g., in-role and extra-role performance). All utilized measures proved to be reliable and valid in previous research [e.g., 3, 7, 8, 9]. Data collection is still ongoing; intended sample size is  $N = 150$  complete data sets.

*Results:* Correlation analyses showed meaningful, significantly positive correlations between specific character strengths and different dimensions of job performance. Hierarchical regression analyses indicated that character strengths explained significant amounts of variance of the different dimensions of job performance above and beyond general mental abilities (up to 25%) and the Big Five (up to 29%). Among the most important predictors were the character strengths perseverance, social intelligence, teamwork, and leadership.



*Conclusions:* Results are in line with previous publications on the correlations between character strengths and job performance [3, 4]. Moreover, results indicated that character strengths predict job performance above and beyond general mental abilities and the Big Five providing important information on the incremental validity of these relatively new constructs above and beyond more established ones in psychological research. Additionally, results have practical implications for personnel selection and personnel development.

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## Well-being and Resilience in the Workplace: Implementation Lessons from Australia

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**Keywords:** resilience, well-being, workplace, implementation, action research

*Background:* Building resilience, the ability to adapt to adversity, is beneficial for individuals and the organisations in which they work. While high quality evidence suggests that resilience-building interventions may benefit employee health (mental and physical) and work performance [1, 2], there is little guidance as to how to implement such programs in organisational settings.

*Aim:* Drawing on implementation science [4], action research [5], and realist evaluation [6], this study aimed to design, implement, and evaluate a workplace wellbeing and resilience program co-produced with participants over several iterations to address the question ‘What works for whom and in what circumstances?’

*Method:* Adopting a mixed-method approach, this study examined the longitudinal relationship between the implementation of the program (resilience-building workshops for white collar managers and team members) and quantitative outcomes (Resilience at Work; RAW [3]; archival human resources data on absenteeism, turnover, safety, etc.) while thematically analysing qualitative data (workshop feedback surveys and participant action plans) to inform the ongoing and iterative development of the program over a 12-month period.

*Results:* Multilevel modelling indicated that, throughout the course of the program, team members built RAW in terms of Networks ( $\beta = 0.44, p = .004$ ) while managers experienced reduced Authenticity ( $\beta = -0.38, p = .039$ ) and Cooperation ( $\beta = -0.38, .039$ ). Paired t-tests showed significant decreases in absenteeism, annual leave days, and injuries during the program. Thematic analysis of the qualitative data indicated that the program was enjoyable and interesting to participants and promoted individual wellbeing, resilience, positive attitudes towards the organisation, and team cohesion.

*Conclusions:* This study demonstrates the value of adopting an action research approach to integrate participant feedback in the iterative design and implementation of a workplace wellbeing and resilience program. To improve implementation of wellbeing and resilience programs in the workplace, the development of wellbeing literacy [7] and psychological safety are recommended.

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## Outcomes and Recovery after Brain Injury Trial (ORBIT-RCT): Using Positive Psychology Interventions to Improve Mental Health Outcomes after Traumatic Brain Injury?

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**Keywords:** brain injury, outcomes, interventions, well-being

*Background:* Traumatic brain injury (TBI) is a significant public health problem globally. TBI survivors are at long term risk of significant comorbid psychiatric problems including anxiety and depression. Of concern is the recent finding that individuals are at risk of novel onset psychiatric disorders at 6-12 months post-injury<sup>1</sup>. Any consideration of mental health outcomes should encompass a complete state assessment of both illness and wellbeing<sup>2</sup>.

*Aim:* This research investigated the efficacy of positive psychology interventions in the prevention of mental health problems in the first six months post-injury.

*Method:* Mild to moderate TBI participants (n=52) were prospectively recruited from a major public hospital in north Queensland, Australia. They were randomised into one of three treatment arms: treatment as usual (TAU), bibliotherapy, and positive psychology (What Went Well - WWW). Participants were assessed at four time points: Time 1 (initial), Time 2 (2 weeks), Time 3 (3 months), and Time 4 (6 months). The assessment protocol included the Mini-International Neuropsychiatric Interview (MINI), Rivermead Post-Concussion Questionnaire (RPQ), Quality of Life After Brain Injury (QOLIBRI) scale, Depression Anxiety Stress Scale (DASS-21), Gratitude Questionnaire (GQ), and the Optimism, Life Satisfaction and Positive Emotions subscales from the Comprehensive Inventory of Thriving (CIT).

*Results:* A 2x3 split-plot analysis of variance (SPANOVA) with time (baseline, post-intervention) and treatment group (TAU, Bibliotherapy, Positive Psychology) was conducted to examine main effects and interactions for Time 1 and 2. Significant main effects for time were found for the majority of measures indicating a decline in symptoms post-injury. No significant time effects were found for QOLIBRI Daily Life, CIT Life Satisfaction, CIT Positive Emotions, and the GQ. Significant Time x Group interactions were found for three measures: the RPQ3 ( $F_{2,24} = 4.446, p = 0.023, \eta_p^2 = 0.270$ ), QOLIBRI Emotions ( $F_{2,24} = 3.61, p = 0.043, \eta_p^2 = 0.231$ ), and the CIT Optimism scale ( $F_{2,25} = 4.019, p = 0.031, \eta_p^2 = 0.243$ ). These indicated superior efficacy of the bibliotherapy and WWW interventions for the reduction of post-concussive symptoms, TAU for psychological wellbeing; and WWW for optimism.

*Conclusions:* The ability to prevent the onset of psychiatric problems after TBI would have significant consequences for individuals, families, their communities, and health services. The results from the first phase of ORBIT-RCT suggest that specific interventions at different time points in the recovery process may be critical. At the time of injury, bibliotherapy

interventions to educate individuals and their families are important to normalize symptoms and define the recovery process. Brief positive psychology interventions that target specific areas of wellbeing that are known contributors to recovery after illness, could then be introduced. At this stage, optimism based interventions appear promising.

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## Mediating Effects of Flow on Harmonious Passion: Contribution to the Exploration of Bright Side and Dark Side of Flow in Educational Context

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**Keywords:** education, flow, passion, persistence, vocational training

*Background:* Over the past 35 years, empirical analyses have mainly focused on the “bright sides of flow”. But in spite of its positive implications for life, flow presents an amoral character [1]: it can be used for both adaptive and less positive ends [2]. Thus, some researchers are involved in the study of the phenomenon termed for convenience as “dark side of flow” [3]. In the same vein, the dualistic model of passion [4] proposes the existence of two types of passion: harmonious passion (HP) promotes flexible persistence (FP) whereas obsessive passion (OP) thwarts it by causing rigid persistence (RP).

*Aim:* This preliminary study uses the “Dig-e-Lab” project (as regards vocational online training programs) to test a model exploring the relationships between students’ passion, flow, and persistence (flexible vs rigid) as presented in Figure 1.

*Method:* This contribution focuses on 345 Master students in Univ. Lille, via an online survey.

*Tools:*

- General passion scale [5]
- Flexible/rigid persistence scale [6]
- EduFlow-2 scale [7]

*Results:* Results from SEM analysis yielded good fit indices: CFI=.92; TLI=.91; RMSEA=.053; SRMR=.07. As expected, the model (Figure 2) confirms the relationships between (1) HP-FP; (2) OP-PR; (3) HP-Flow. It highlights that flow has similar effects on both FP and PR.

*Conclusions:* This study confirms that passion and flow have two sides. The mediating effect of Flow between HP and PR really is a key outcome: this is an original contribution to the exploration of the dark side of flow.

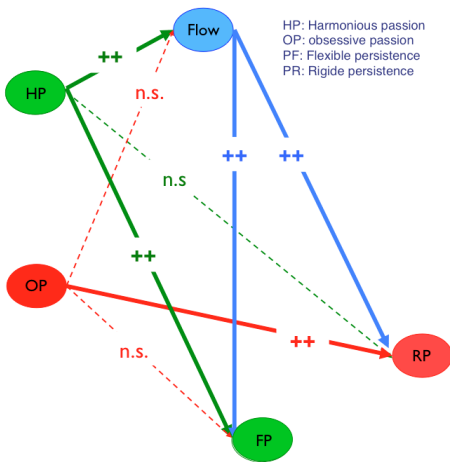


Figure 1. Expected model of relationships between Passion-Flow-Persistence

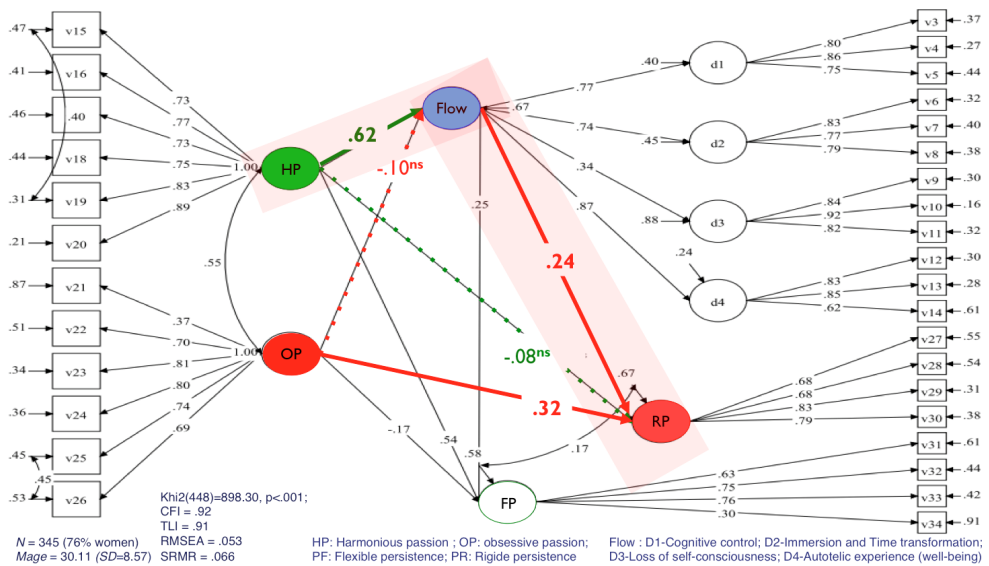


Figure 2. Mediating effect of Flow between harmonious passion and rigid persistence.

### Acknowledgments

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## Purposeful Processes of Resilience: An Autoethnography of Anorexia

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**Keywords:** resilience, communication, autoethnography, anorexia, well-being

*Background:* Eating disorders such as anorexia nervosa and bulimia nervosa affect up to 12 million people in the United States. [6]. Eating disorders are a destructive issue; however, only 10% of reported diagnoses come from men [3]. While there is a lack of research regarding the experiences of eating disorders in men, there is also a lack of research regarding the recovery process as well. After struggling with anorexia and body dysmorphia for several years, the author developed a path to recovery that is grounded by resilience theory, in which resilience is conceptualized as a dynamic and discursive process of reintegrating after adversity [1]. Autoethnography [2] was then used to record the process of recovery and guide the data collection and analysis. As a product of discourse, resilience is developed through communication processes [1] and by purposefully enacting these communication processes on a daily basis, the author was able to develop resilience, recover from anorexia and body dysmorphia, and improve his overall well-being. Eating disorders have often been described as an epidemic and the “modern psychopathology of our culture” [3]. Within positive psychology and resilience research there is a growing emphasis on individual capacities and characteristics as factors of resilience development, as well as the ways in which resilience is culturally situated [5]. This autoethnography satisfies the need for culturally situated research within the field of resilience by discerning patterns of cultural experience through the analysis of field notes, reflections, and artifacts.

*Aim:* The purpose of this study is to share lived-experiences of male anorexia as well as paint a picture of the recovery process. Through autoethnography, this study explores the link between communication and positive psychology with the goal of developing strategies of resilience that are culturally sensitive and adaptable. The overarching question that guided the study was; how can communication be used to develop resilience and improve well-being? Researchers have noted that there is a dearth of qualitative research on anorexia nervosa, and eating disorders in general [4]. With this autoethnography, the goal is to shed light on lived-experiences of male anorexia, the process of recovery from anorexia, and contribute to the extant research on resilience.

*Method:* An autoethnographic approach was utilized to collect data during the author’s recovery from anorexia. Using the communication processes of resilience [1] the author designed a strategy of resilience to recover from anorexia and body dysmorphia. The process and results were recorded via autoethnography and then analyzed using a thematic analysis grounded by resilience theory. Using Buzzanell’s [1] communication processes of resilience as the basis for thematic analysis, the author coded the data to identify changes in communication, changes in behavior, and the relationship between communication and behavior.

*Results:* The initial purpose of the study was to develop a strategy of resilience based in communication to recover from anorexia. The study has provided an in-depth understanding of how one person recovered from anorexia and body dysmorphia through the use of communication and resilience. The strategy of resilience not only helped the author recover from anorexia and body dysmorphia, it increased his overall well-being. The dynamic interaction of various communication processes facilitated the author's recovery from anorexia and the development of healthier habits that extend beyond diet and physical health. Findings suggest that resilience is culturally situated, dependent on the adversity being experienced, and can be developed and deployed strategically.

*Conclusions:* This study is important for several reasons. First, this study delves in to the experience of eating disorders in men and elaborates on the authors specific process of recovery. Through use of autoethnography, the author demonstrates the therapeutic value of writing as well as the importance of cultural implications associated with eating disorders and resilience. By exploring the connection between communication and resilience, this study bridges communication and positive psychology while also providing a framework to use both fields strategically to create cultures of well-being and resilience.

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## Association between the Frequency of Laughter and Oral Health in Community-dwelling Older Japanese

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**Keywords:** frequency of laughter, oral health status, older people, cross-sectional study

*Background:* Previous studies have reported the relationships between psychological factors such as depression or anxiety and oral health status. However, little is known about the association between positive psychological factors and oral health status.

*Aim:* To examine the association between frequency of laughter and oral health status among community-dwelling older Japanese.

*Method:* A cross-sectional study was conducted using the data from the Japan Gerontological Evaluation Study (JAGES), a self-reported survey in 2013. Participants were 24,038 (11239 men and 12799 women) community-dwelling Japanese aged 65 years and older. The outcome variable was current number of remaining teeth. The daily frequency of laughter (almost every day, 1–5 times per week, 1–3 times per month, and almost never) was used as an explanatory variable. Age, sex, living condition, equivalized household income, educational attainment, smoking status, depression, self-reported comorbid status (diabetes/stroke) were used as covariates. Logistic regression models were applied and odds ratios (ORs) and 95% confidence intervals (CIs) for the number of remaining teeth  $\geq 20$  were calculated.

*Results:* The frequency of laughter was significantly associated with the number of remaining teeth  $\geq 20$  after adjusting for all covariates (adjusted OR in comparing “1–5 times per week” with “almost never”, 1.20, 95% CI: 1.04–1.37, and adjusted OR in comparing “almost every day” with “almost never”, 1.16, 95% CI: 1.01–1.33).

*Conclusions:* There was an association between high frequency of daily laughter and good oral health status that is independent of depression and other socioeconomic status. Future longitudinal studies are needed to examine whether laughter can contribute to maintaining good oral health.

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## Mindfulness Training Promotes Adaptive Regulation of Both Positive and Negative Emotions in Depressed Individuals. Evidence from RCT study

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**Keywords:** MBCT, mindfulness, emotion regulation, positive affect

*Background:* Experiencing positive emotions has beneficial effects on mental and physical health. Major depression is a mood disorder with sustained negative affect, difficulties experiencing positive affect and altered emotion regulation [1]. There are some indications that Mindfulness-Based Cognitive therapy (MBCT) may lead to improvement of emotion regulation and enhanced responsiveness to positive emotions in depression [2], but existing evidence is scarce.

*Aim:* We examined if MBCT can modify the regulation of difficult emotions and lead to increased expression of positive emotions in depressed individuals.

*Method:* 56 individuals diagnosed with major depression were randomly assigned to MBCT (n=26) and Waiting List (n=30) conditions. Before and after the 8-week MBCT (or waiting), participants completed questionnaires evaluating emotion regulation, satisfaction with life and an online 7-day diary. At the end of each day, they described the important events that happened to them and rated each event in terms of stressfulness, positivity, and how mindful they were.

*Results:* We found improved regulation of difficult emotions and greater satisfaction with life at post tests for the MBCT group. We found increase self-efficacy in expressing positive emotions and in managing negative affect. In addition, multi-level analyses found in MBCT group participants felt more mindful than they did at the pre-test and they perceived events as significantly more positive and less stressful.

*Conclusions:* Results of the current study suggest that MBCT promotes adaptive emotion regulation. Following mindfulness training participants were more focused on the present moment, and they viewed everyday events as more positive and less stressful. These findings add to the research showing beneficial effects of mindfulness training in depressed individuals and suggest possible mechanism of therapeutic change through improving emotion regulation skills.

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## **Thriving in Response to Indentured Childhood Labor: A Qualitative Study of Successfully Aged Swiss Verdingkinder**

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**Keywords:** child labor, thriving, posttraumatic growth, successful aging, qualitative study

*Background:* The Swiss ‘Verdingkinder’ had to experience manifold adversities during their child labor such as emotional abuse and physical neglect. Research on the life-long impacts of such childhood adversity has mainly focused on the negative effects. However, little is known about the processes and factors that might transform such experiences into positively-evaluated resources (i.e. thriving) and thereby potentially foster successful aging.

*Aim:* This study set out to examine the relationship between thriving in response to child labor and its associated adversities and successful aging with a sample of successfully aged, former indentured child laborers in Switzerland.

*Method:* Participants were selected based on subjective and objective health-related attributes. Only those who could be identified as ‘successful agers’ were invited to semi-structured interviews. Twelve former Verdingkinder, mean age: 71 years, participated. The interviews lasted about one to two hours. Data was analyzed using the paradigm model of the Grounded Theory.

*Results:* Various adversities such as social isolation, discrimination and physical abuse, and negative effects such as loneliness, lack of education and lack of trust in society were reported. However, where thriving was triggered, the factors ‘lightheartedness’, ‘social purpose’, and a lifelong motivation for ‘self-enhancement’ were associated with successful aging. Important factors for the possibility of thriving such as resilience, turning points, reflection and motivation were reported for the time during and after the child labor.

*Conclusions:* The identified factors show similarities with posttraumatic growth and established predictors of health and well-being. Therefore, under certain circumstances early and prolonged adversity can also provide the opportunity to develop positive resources for successful aging.

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## Exploring Musicians' Positive Self-Evaluations in Relation to Their Perfectionism

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**Keywords:** optimal performance, positive self-concept, adaptive perfectionism

*Background:* Positive emotions are linked to greater satisfaction and success at work, resilience and increased problem-solving skills [1]. Yet, very little is known about musicians' positive approaches that help them to give peak performances.

*Aim:* To explore how musicians' self-concept can help their perfectionism, this study explores whether positive self-views are linked with higher levels of self-reassurance, and perfectionistic aspirations as high performance standards.

*Method:* 233 professional musicians and tertiary level music students completed a battery of validated and self-developed scales related to self-views and perfectionism. Exploratory factor analysis of the responses suggested a one factor solution for self-concept. For perfectionism, five factors emerged expressing participants' Negative Reactions to Mistakes, Fear of Negative Evaluation, Satisfaction with Achievement with Self-confidence, and Perfectionistic Aspirations in a) Practising, and in b) Performing. To test how self-concept predicts perfectionism, five sets of regression analyses were performed, in which the self-concept factor was entered into the model as the independent variable and the five factors of perfectionism were entered as the dependent variables.

*Results:* Positive self-concept positively predicted the Satisfaction with Achievement with Self-confidence, and negatively the Negative Reactions to Mistakes and the Fear of Negative Evaluation. The self-concept factor yielded medium to strong effect sizes, explaining between 13% and 43% of the variance in the perfectionism factors concerning evaluation,  $p < .001$ . However, self-concept had a small positive effect on the prediction of the Perfectionistic Aspirations in Performance (explaining 16%,  $p < .01$ ) but did not contribute to predicting Perfectionistic Aspirations in Practising.

*Conclusions:* The results of this study suggest that the presence of positive thoughts and emotions such as self-acceptance, satisfaction with one's expertise and healthy personal and professional self-esteem increase musicians' satisfaction, confidence levels about their playing. Having a combination of healthy self-concept and healthy perfectionism lead musicians to experience their performance with calmness, even when making errors during practising and performing. The discussion will highlight the structure of self-concept and the helpful effects of perfectionism that can enhance musicians' performance practice.

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## Meaning in Life and Values in Patients with Severe Mental Disorders in the Perspective of Recovery

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**Keywords:** recovery, meaning, values, psychiatry

*Background:* Recovery is a personal process of growth that involves hope, self-identity, meaning in life and responsibility. What are the determinants of meaning? Spirituality, self-esteem and close relationships may help to gain meaning in life. In particular, meaning depends on the fit between the values, goals and needs of the individual and the values, goals and needs of the social structure in which he/she lives. Determinants of meaning have not been explored among populations of patients with persistent psychiatric conditions. However, an evidence-based approach aiming at assessing such determinants should provide some insight into the psychotherapeutic aspects of recovery.

*Aim:* We tested a model hypothesizing that some symptoms and social parameters of patients are related to values, and secondarily to meaning in life, and in turn that meaning is associated with various parameters, such as depressiveness and self-esteem.

*Method:* We assessed 176 patients with schizophrenia, anorexia, borderline personality disorder and bipolar disorder. Diagnoses, as well as symptoms were assessed. Also, we studied the importance of Values and Meaning in life.

*Results:* Overall, our hypotheses proved correct: firstly, characteristics such as depression, hopelessness, self-esteem and the number of relationships influenced values; secondly, the presence and an enactment of values were associated with meaning, and thirdly, meaning was associated with some symptoms and social characteristics. This model was confirmed in the four psychiatric populations under study.

*Conclusion:* These results support the relevance of addressing values and meaning in the recovery-oriented care of patients with persistent psychiatric disorders, in addition to other psychosocial interventions which are more systematically considered in this area. In particular, clinicians should consider that meaning relies on values and that meaninglessness may alter well-being and foster symptoms.

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## Are Various Forms of Happiness Equally Affected by Work vs. Non-Work Contexts?

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**Keywords:** well-being, work, non-work, context

*Background:* Happiness may vary with life-domains. Authentic-Durable Happiness was found partially context independent [3], a pattern not yet tested in other forms of happiness (Hedonia, Harmony, etc.).

*Aim:* Testing whether the structure of different forms of happiness would resist differently to context variations, with possible emergence of context-independent dimensions.

*Method:* Various happiness constructs (Hedonic-emotional; Authentic-Durable, Satisfaction with Life; Harmony in life) were compared across work vs. non-work contexts. We specified general instructions and/or some items of several scales (Diener's SPANE and SWLS; SA-DHS [1]; HILS [2]) by adding, e.g., 'in your professional life' vs. 'in your non-professional life'. Each of 991 MTurk participants filled all scales (57.8% employees, mean age=34.4 [18; 65]. For each scale, 1) The original structure was checked by CFA separately work and non-work versions, 2) Combining professional and nonprofessional items, new structures were extracted by oblique PCA and confirmed by CFAs.

*Results:* Considered separately, all original structures were preserved despite contextualization (RMSEAs ranged from .034 to .085, CFIs from .961 to .997, SRMRs from .008 to .047 and  $\alpha$ s from .91 to .97). Differences only appeared at the transversal level (Fig. 1):

*Satisfaction and Harmony:* 2 correlated factors separately loaded work and non-work items.

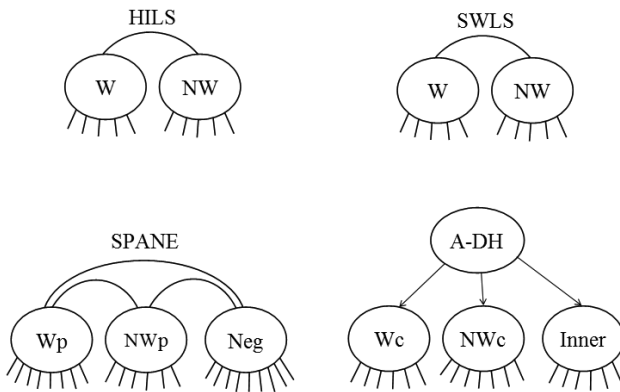
*Hedonia (SPANE):* 3 factors appeared, 2 loading positive items separately for work and non-work (W, NW, 8 and 6 items). The 3<sup>rd</sup> –Context-Independent– joined 9 negative items.

*Authentic-Durable Happiness:* A general A-DH factor dominated 3 factors, work and non-work contentment (Wc, NWc, 6 and 7 items), and –Context-Independent– Inner-Peace' (6 items).

For all combined models of happiness, RMSEAs ranged from .051 to .070, CFIs from .961 to .982, SRMR from .026 to .033.

*Conclusions:* SWLS and Harmony only required context-specific components. SPANE and Authentic-Durable Happiness required both context-specific and transversal components. Implications for the multiform nature of happiness will be discussed.





**Figure 1.** Combining work (W) and non-work (NW) items

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## Positive and Productive Solitude: Experience and Predictors

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**Keywords:** solitude, personal development, qualitative and quantitative research

*Background:* Research of solitude are becoming more common in psychology [2], however, solitude is not a frequent topic in positive psychology perhaps it is because phenomenon can be both negative and positive for the individual [1]. One of the promising areas of research relevant to the solitude theory and positive psychology is studies of a positive solitude. Many authors write about the value of solitude for the personality, such as P. Tillich, M. Buber, K. Jaspers, K. Jung, A. Maslow, V. Frankl, A. Lange, E. Lucas, I. Yalom, and B. Miyuskovich. Nevertheless, currently there is a lack of specific empirical studies, which confirm the developing potential solitude for personality.

*Aim:* The aim of the study is to generalize existing studies on positive solitude, describe experiences associated with it, to examine the correlation between personal characteristics and solitude. This research is ongoing and at the conference will be presented a project of further empirical research steps.

*Method:* A mixed-methods empirical study of solitude experiences (N=204): questionnaire about solitude, Multidimensional Inventory of Loneliness Experience, Washington University Sentence Completion Test and Existence Scale.

A Qualitative research (N=10). This study uses Interpretative Phenomenological Analysis to gain themes about an experience of positive solitude.

A quantitative research (project).

*Results:* Theoretical review of existing studies on positive solitude. We found the correlation between and stages of ego development and the positive attitude towards solitude ( $p < 0.05$ ), experience positive emotions ( $p < 0.05$ ) a wider range of activities ( $p < 0.001$ ) in solitude. In a qualitative study, there were identified themes of experiences of positive and productive solitude (for example, voluntariness, internal autonomy, sense of unity and relatedness with others).

*Conclusions:* Positive solitude is an experience that is associated with personal development. Description of the experience of positive solitude and the study of his personal and environmental predictors can help to find way to psychological well-being and personal growth.

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## **Positive Psychology & Coaching Relationship status: It's complicated**

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**Keywords:** positive psychology, coaching, integration

*Background:* Positive Psychology and Coaching Psychology, two branches of science arguably still in their infancy, have been hailed as natural partners [Biswas Diener, 2010; Kauffman & Scoular, 2004; Linley & Harrington, 2007]. Alongside its early development a range of training opportunities have emerged over the past decade offering qualifications in “Positive Psychology Coaching”. More recently practitioners and academics even started to speak about marrying the two [Lomas, Tunariu, Hart et al., 2017]. However, any existing models and attempts at conceptualizing its practice seem to be isolated with little or no academic debate or research evidence behind their effectiveness.

*Aim:* The aim of this presentation is to raise awareness of the current state of research into positive psychology coaching and thereby explore their current “relationship status” from an academic’s as well as a practitioner’s perspective. While the two fields share fertile common ground and a high potential for meaningful integration, the author will argue that the two disciplines have only just started dating. Coaches and researchers around the globe are called upon to create, pursue, share and engage critically with each other’s models, approaches to practice and research findings.

*Method:* Selected publications on positive psychology coaching will be discussed to open up meaningful avenues into future research and argue for patience and caution when it comes to promoting its application. Critical obstacles to the sound development of positive psychology coaching models will be presented.

*Results:* Positive psychology and coaching have only recently started to get to know each other. Talking about a marriage at this point is pre-mature and potentially toxic to the relationship. While the potential for a strong and lasting partnership is eminent, practitioners and researchers alike have a responsibility towards both the receivers of Positive Psychology Coaching as well as the healthy development of meaningful and academically sound models for practice.

*Conclusion:* Further research is required in order to arrive at meaningful integration in this exciting area of coaching practice. Crucial factors in this development are close collaboration between researchers and coaches utilizing positive psychology in their practice, a commitment to a sophisticated scientific process and transparency towards its service users. Known limitations in the area of coaching psychology as well as issues arising from the ever-growing popularity of positive psychology coaching will remain obstacles on the journey towards a strong and flourishing relationship. A complex, multi-layered, polygamous relationship is more likely to remain the status of positive psychology and coaching for the time being.

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## **Impact of Digital Media Usage Monitoring on Happiness, Self-esteem and Life Satisfaction: Intervention Study on Adolescents in India**

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**Keywords:** digital media, happiness, self-esteem, life satisfaction

*Background:* Humans are born with talents of various kinds and to revive those talents from the deepest most layer of our being, by eradicating all sorts of distractions, needs immense concentration. The human concentration span has been decreasing over the years and is at its lowest. As researchers have proved that average attention span has now dropped to eight seconds, with the goldfish standing in at nine seconds. Use of digital media is one of the biggest distractions that hinder the connection between one's true self and their present self and the key to find connection between these two self is moderation in all aspects of life.

*Aim:* The aim of the current study was to explore the impact of digital media usage monitoring on happiness, self-esteem and life satisfaction.

*Sample and tools:* 100 adolescents (17-19 year old) were selected randomly after taking their informed consent from St. Xavier's College, Jaipur, India. Four measurement tools were used i.e. Digital Detox Questionnaire, Happiness Scale, Satisfaction with Life-Scale, Self-esteem scale.

*Method:* The study consisted of three phases namely- Pre, intervention and post. In pre-test phase all the tests were conducted on 100 adolescents. Then, the subjects were divided into two groups- Experimental and Control group. During intervention experimental group was advised to use digital media for maximum of two hours for next ten days of intervention programme. Technology break technique was used as a solution for experimental group for 10 days period. They were told to use digital media after 45 minutes of undistracted work so that they can satisfy their technology fix and maintain focus. They were suggested to increase non screen activities - like in person social interaction, writing, travelling etc. To ensure the balanced usage of digital media, subjects were asked to share their daily internet usage by sharing the screenshot of internet usage tracking apps. In post-test, the performance of experimental group and control group is compared, in reference to use of digital media, mindfulness, happiness, self-esteem and life satisfaction.

*Results:* The intervention showed significant difference in performance of experimental group than their counterparts. Mean, SD and t-test were applied to see the effects of intervention on both experimental and control groups. In Pre-test phase the result showed that those who were highly addicted to digital media had lower level of life satisfaction and happiness. In addition to this it was also observed that those who were using digital media less than an hour had low level of happiness. So, after intervention balanced use of digital media showed significant difference on happiness, self-esteem, and life-satisfaction.

*Conclusions:* In the end the research concludes that key to maintain balance between digital media usage & happiness lies in limited use. Only then we can regain our ability to focus. The current study suggests that intervention programmes based on mindfulness, empathy can be organised for children so that the development of these critical skills may help in better navigating the digital future.

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## Relationship between Happiness, Social Orientation, Trust and Agency

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**Keywords:** happiness, social orientation, trust, agency, psychological wellbeing

*Background:* Studies to date show that happiness is associated with individualistic self [Diener, Diener & Diener, 1995], but at the same time experiencing positive emotions leads to favorable perception of others through the *feel good do good phenomenon* [Lyubomirsky, Diener & King, 2005].

*Aim:* The aim of the presented research was to investigate the association between happiness and the attitude towards others expressed in social orientation and how this relationship was affected by levels of trust, agency and community.

*Method:* 142 students (91 women) aged 19-46 ( $M = 23,99$ ;  $SD = 6,63$ ) took part in the study. First, the level of their social orientation was assessed by SVO slider measure [Murphy, Ackermann & Handgraaf, 2011], where participants had to decide about allocating money among themselves and unknown partner of interaction (obtained results were coded on the following scale: competition-individualism-prosocial behavior-altruism). Then, they completed measures of subjective happiness [Lyubomirsky & Lepper, 1999], psychological well-being [Ryff & Keyes, 1995], trust [Yamagishi & Yamagishi, 1994], agency-communion [Abele & Wojciszke, 2007].

*Results:* Results showed that the more participants were thinking about maximizing their gains, the higher level of happiness and psychological wellbeing they declared. This association was moderated by the level of trust (Fig. 1) and mediated by the level of agency (Fig. 2).

*Conclusions:* Those results indicate that the links between happiness and social orientations are not so evident and certainly require further investigation in future. Trust and agency appear to be important factors when explaining effect of attitude towards others on happiness.

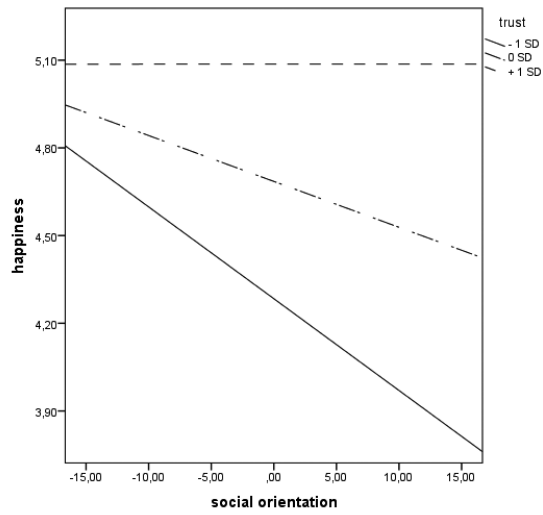


Figure 1. Effect of social orientation of happiness at different levels of trust

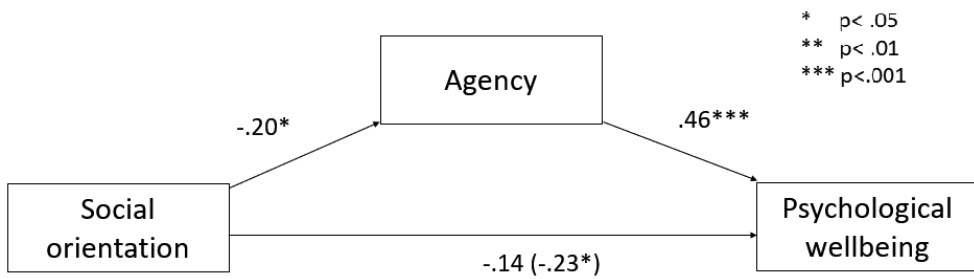


Figure 2. Relationship between social orientation and psychological wellbeing mediated by the level of agency

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## Reducing Test Anxiety: Evaluating Contemplative Practices in Education

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**Keywords:** mindfulness meditation, expressive writing, test anxiety, education

*Background:* Test anxiety manifests both physically (i.e., trembling, sweating, restlessness) and cognitively (i.e., difficulty concentrating, fear, apprehension, tension; 1). Previous research found that these symptoms led to academic setting issues; specifically, students with high test anxiety have lower GPAs (2), and anxiety interferes with information retention along with exam performance (3). A proposed method for reducing test related anxiety is contemplative practices (mindfulness meditation and expressive writing).

*Aim:* The present study expanded past research by comparing effects of mindfulness meditation, expressive writing about the exam, and expressive writing about summer plans on mood change and test grade.

*Method:* Participants ( $N = 81$ ) completed an online survey two weeks prior to an exam including: Mindful Attention Awareness Scale (MAAS), 14-Item Resilience Scale (RS-14), and Cognitive Test Anxiety Scale (CTA). Students attended an “exam preparation activity” immediately before the exam. Participants were designated to a guided mindfulness recording, expressive free write task, or control writing activity for 10 minutes. Individuals completed the Positive and Negative Affect Schedule (PANAS) before and after manipulation.

*Results:* A 3 x 2 mixed ANOVA found no main effect of intervention,  $F(2, 55) = .88$ ,  $p = .42$ ,  $\eta^2 = .03$ . Trait test anxiety was examined as a predictor of positive mood change after the intervention. The overall model was significant,  $F(5, 52) = 2.92$ ,  $p = .02$ ,  $R_2 = .22$ . Trait test anxiety was not a significant predictor,  $b = -0.15$ ,  $t(52) = -1.68$ ,  $p = .10$ . While the interaction between expressive writing groups and trait test anxiety was not significant,  $b = 0.10$ ,  $t(52) = 0.78$ ,  $p = .44$ , the interaction between meditation/summer expressive writing and trait test anxiety was marginal,  $b = 0.22$ ,  $t(52) = 1.94$ ,  $p = .06$ . Trait test anxiety was also examined as a predictor of negative mood change before and after the intervention. The overall model was significant,  $F(5, 52) = 3.04$ ,  $p = .02$ ,  $R_2 = .22$ . Trait test anxiety was not a significant predictor,  $b = -0.19$ ,  $t(52) = 1.13$ ,  $p = .27$ .

*Conclusions:* Although the study produced few statistically significant results, a promising trend in utilizing interventions for increasing exam grades, increasing positive mood, and decreasing negative mood was uncovered. This investigation provides building blocks for understanding effectiveness of contemplative practices in reducing exam related stress. Future studies should employ a more comprehensive method for measuring mood, target different topics of expressive writing, and increase the sample size to attain more reliable results.



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## The Three Faces Of Life Satisfaction: Common and Specific Predictors Of Life Satisfaction As Measured With Three Different Life Satisfaction Scales

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**Keywords:** life satisfaction, measurement, validity

*Background:* A number of instruments aimed at assessing life satisfaction have been developed to date [1]. However, only a small number of studies have compared different life satisfaction measures in order to evaluate whether the same results are obtained using different life satisfaction instruments [2].

*Aim:* The main aim of the present study was to compare the validity of three measures assessing global life satisfaction. More specifically, we examined whether the socio-demographic variables (age, gender, level of education, marital status, parenthood, employment, and household income), affective well-being (positive and negative affect), social support, and religiosity have similar predictive power for different measures of life satisfaction.

*Method:* A total of 824 adults (54% females;  $M_{\text{age}} = 42.36$ ,  $SD = 11.83$ , age range from 20 to 82) from Serbia participated in the present study. Participants completed the three measures of life satisfaction: Satisfaction with Life Scale, Personal Wellbeing Index, and a single-item life satisfaction scale, and measures of positive affect, negative affect, social support, religiosity, and socio-demographic questionnaire. Hierarchical regression analyses were used to examine the contribution of predictors to life satisfaction.

*Results:* The results showed that the percentage of variance explained in life satisfaction by a set of predictors was comparable across the three life satisfaction measures (between 41% and 45% of a total variance). Among the socio-demographic variables, income and age have been shown to be significant predictors of global life satisfaction as measured with all three scales (for income:  $\beta$ s range from .22 to .25; for age:  $\beta$ s range from -.15 to -.27), whereas education was significant predictor of life satisfaction as measured only by the SWLS ( $\beta = .12$ ). In addition, positive affect ( $\beta$ s range from .38 to .52) and social support ( $\beta$ s range from .07 to .11) were significant predictors of all three measures of life satisfaction, whereas negative affect and the importance of religion demonstrated unique predictive power for the PWI ( $\beta = -.16$  and .11, respectively) and a single-item scale ( $\beta = -.14$  and .12, respectively), but not for the SWLS.

*Conclusions:* Our findings indicated that the performance of the three life satisfaction measures were highly comparable, and that the effects of robust unique predictors of life satisfaction, such as income and positive affect, did not depend on the measures used to assess life satisfaction. However, the effects of predictors with lower unique predictive power (such as the importance of religion) can depend on the scale used to measure life satisfaction.

### **Acknowledgments**

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**“Flow at Work”****A Confirmatory Study of Flow in the Workplace and the Exploration of Flow-conducive Personality and Organizational Factors in the Public and Private Sector***Gyöngyi Kállai*

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**Keywords:** flow, personality, organizational factors, workplace, multimethod

*Background:* The age of the 4th industrial revolution [1], also referred to as the VUCA World [2] has had a huge impact on the world of work, which can be quantified by the significant increase of workplace-induced stress, depression and related health problems [3]. There is scarce data in scientific literature on the dimensions of the Optimal Experience in the workplace, and there is a gap regarding both the “intra-personal” and the “organizational” Flow-conducive variables.

*Aim:* One objective of the study was to confirm that Flow is the most optimal, negentropic state of consciousness associated with significantly higher positive cognitive, motivational, emotional and activation experience values than Boredom, Anxiety and Apathy during work (cf.: Paradox of Work) [4,5]. The main aim was to identify organizational factors and personality dimensions that can potentially induce/catalyze Flow occurrence. The development of a research toolkit for workplace contexts was also aimed for.

*Method:* Combined, multimethod design. Four profit-orientated and four non-profit organizations represented the Hungarian labour market. Repeated cross-sectional sampling method was applied over 12 months, in 3 phases: I. Online: (N=172) 848 samples to measure Flow and 4 anti-flow states [6,7], personality dimensions [8, 9,10] and organizational factors [11]. II. ESM: (N=94) 1751 samples to measure Flow and the 3 anti-Flow states [12,13] III. Semi-structured interviews: detected Flow and organizational factors [14]. Analytical methods like ANOVA, correlational analysis, principal component analyses, multidimensional cross-table analyses, content analysis were applied. [15].

*Results:* Twelve eudaimonic (cognitive, motivational) dimensions were strongly associated with the Flow state, incl. “intrinsic motivation”. Perception of “clear goals”, “control” and “productivity” were associated with Flow and Boredom as well. Hedonic (emotional and affective) wellbeing dimensions did not distinguish the Flow state only: feeling “happy”, “cheerful” and “friendly” was reported in Boredom, too. Participants reported being significantly more “excited” in Anxiety. Activation levels are significantly higher in Flow.

Five temperament- and character variables, such as low “Harm Avoidance”, “Persistence”, “Self Directedness”, “Self Transcendence”, “Cooperativeness” and low “Tradition” value orientation were clearly associated with significantly higher Flow frequency.

Five organizational factors were identified that are strongly associated with significantly more frequent Flow occurrence: opportunity for “Autonomy”, opportunity for “Personal Development”, excellent “Leadership”, “Interdependence/Team Work” and opportunity for “Concentration”.

Thirty-nine special combinations of personality and organizational variables were found where a given personality dimension was associated with a significantly higher level of Flow frequency in a given Flow-conducive organizational context [16].

*Conclusions:* Flow offers both the eudaimonic and hedonic well-being qualities of experience during work, so can be considered as the most optimal mental state in the workplace. With the successful identification of Flow-conducive organizational- and personality dimensions, the study can contribute to developing work environments which facilitate optimal conditions for mental health and psychological well-being.

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## Relationship between Problematic Internet Use and Resilience among Youth

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**Keywords:** resilience, problematic internet use, obsession, neglect, control

*Background:* Resilience has always been in the center of positive psychology [1]. It was found to play an important role in maintaining normal physical and psychological functioning and thus in the prevention of several mental health problems, such as stress disorders, depression or drug abuse [2]. Resilient individuals are more likely to respond to stress with adaptive and successful coping strategies [3], which may contribute to avoiding risky behaviors, such as behavioral addictions. Adolescence and emerging adulthood are particularly critical life periods when due to neurodevelopmental changes, youth are prone to engage in risky behaviors [4]. Thus, searching for protective factors, such as resilience is extraordinarily important in research and practice.

*Aim:* Since a previous study suggests resilience can serve as protection against internet addiction [5], the main goal of our research was to detect if there is a relationship between problematic internet use (PIU) and resilience. We also planned to find out which subscales of PIU (obsession, neglect, control disorder) are the most significant correlates of resilience. We also examined gender differences in these associations.

*Method:* The sample consisted of 249 youth (female:  $n=155$ , 62.2% and male:  $n=94$ , 37.8%), 14 and 28 years of age (mean of age: 22.5). Data were collected via Internet from November 1, 2017, to January 20, 2018. We created a self-reported online questionnaire hosted on typeform.com. It included demographic questions (gender, age, level of education, socioeconomic status, daily hours of online activity and accessibility), the Hungarian version of the 10-item Connor–Davidson Resilience Scale [6] and the Problematic Internet Use Questionnaire (PIU-Q) [7].

*Results:* While there were no gender differences in the total scores of PIU or its subscales, males scored higher on the resilience scale ( $p < 0.05$  by Student t-test). Resilience was negatively and significantly correlated with all subscales of PIU. In regression analyses, the strongest association was detected with neglect ( $r = 0.31$ ,  $p < 0.001$ ,  $R^2 = 0.10$ ) and the weakest with obsession ( $r = 0.15$ ,  $p < 0.05$ ,  $R^2 = 0.02$ ). Among males, resilience was a significant contributor to each subscale of PIU, while among females, the relationship between resilience and obsession was not significant ( $p > 0.05$ ).

*Conclusions:* According to our results resilience can be labeled as a strong protective factor in the case of PIU which confirms the finding of a similar previous study [8]: the higher the level of the participants' resilience, the lower the level of PIU. Males scored higher on the resilience scale than females, suggesting that they have better abilities to cope and deal with

everyday stress. Since positive psychology's goal is to find factors that can prevent or reduce disorders, we should highlight the importance of strengthening resilience in health education programs to prevent PIU.

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## **The ABC of Mental Health: A Universal Mental Health Promoting Programme to Increase Individual and Community Mental Health**

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**Keywords:** mental health, wellbeing, mental health promotion, public mental health, cross-sectoral

*Background:* In recent years there has been an increased focus on population mental health, and recognition that treatment alone is unlikely to make a significant difference to the escalating rates of mental illness being experienced worldwide. It has been recognized that interventions focusing on prevention and promotion are critical in enabling individuals to protect their mental health.

Mental health promotion can be defined as interventions designed to maximize mental health and well-being by increasing resilience of communities and individuals and by improving environments that affect mental health.

In spite of the many recent and past commendable documents presenting frameworks for mental health promotion, there has been a lot of rhetoric but very little action. Act-Belong-Commit - that originated in Western Australia – was one of the first attempts to develop and implement a population-wide mental health program, as distinct from mental illness prevention or early intervention initiatives.

*Aim:* In 2015 Denmark was the first country outside Australia to adopt the programme. It has since been adapted to a Danish context under the title The ABC of Mental Health (In Danish: ABC for mental sundhed) and is currently being implemented in collaboration between the the Danish National Institute of Public Health and a multitude of stakeholders e.g. the Healthy Cities Network, Local Government Denmark, The Danish Mental Health Foundation, The Danish Scouts, The Red Cross, and seven municipalities across the country.

*Method:* The ABC of mental health targets individuals to engage in mentally healthy activities while at the same time supporting and encouraging organizations that offer mentally healthy activities to promote, and increase participation in, their activities. Partners are encouraged and supported in working together across sectors. Overall, the ABC messages encourage people to be physically, spiritually, socially and mentally active, in ways that increase their sense of belonging to the communities in which they live, work, play and recover, and that involve commitments to causes or challenges that provide meaning and purpose in their lives. This is expected to increase feelings of meaningfulness, manageability, and comprehensibility i.e. sense of coherence and resilience.

The development and implementation of the programme is a constant and dynamic process between the partners. Action research ensures that the programme is rolled out on the best foundation.

*Results:* At the conference we will present the background for the programme, the framework itself, and our findings and experiences to date.

*Conclusion:* The ABC of Mental Health is the Danish adaptation of the Act-Belong-Commit campaign that originated in Western Australia. To date the only comprehensive, population-wide program identified that has a strong evidence base, demonstrated success in implementation, and universal principles of wellbeing

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## Optimistic Explanatory Style, Resilience and Savoring as Predictors of Flourishing in Hungarian Employees

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**Keywords:** explanatory style, resilience, savoring, flourishing, Hungarian employees

*Background:* The Positive Psychology Research team of Eotvos Lorand University (ELTE), Budapest, and the Foundation of Happiness research conduct an ongoing poll about the level of happiness in Hungary. The research team uses 5 different questionnaires to measure happiness, measuring savoring and psychological immunity among others. At the same time Profil Training Ltd and the authors has been working on a new measure of the optimistic mindset, the MQ Test (Kovács and Martos, 2017), which was developed in Hungarian work context. MQ uses 36 personal and work situations; however, for prompting specific explanatory reactions to these situations it applies a situational judgment test approach. The research presented here is part of a research cooperation between the MQ authors and the ELTE team.

*Aim:* Our aim is to investigate the relationship of optimistic explanation as a prerequisite of having a happy life with other constructs of well-being. As previous research showed, optimistic mindset may trigger positive emotions while positive emotions ensure higher energy level and a more secure access to our resources. Following this logic, our goal was to find link between optimistic thinking patterns (as represented by MQ test) and a higher level of happiness and capacity of savoring.

*Method:* In an ongoing data assessment procedure we administer the MQ Test along with an online questionnaire pack of the Happiness research of the ELTE team. Target population is employees of Hungarian firms and we aim at reaching 200 respondents as a minimum.

*Results:* Preliminary regression analysis confirmed the hypothesized relationships. Optimistic explanations to positive and negative events predicted savoring and psychological immune competency which in turn predicted level of flourishing (explained variance in the preliminary sample was 67,1 %).

*Conclusions:* Preliminary findings support the importance of linking different types of conceptual approaches to well-being and to administer the corresponding measurement tools. Furthermore, results indicate that experience of flourishing is supported by skill-like individual characteristics in Hungarian employees. Among them, maintaining and further developing an optimistic mindset and psychological resources like psychological immune competencies and habitual savoring seem to reliably boost flourishing.

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## The Relationship between Ego-Centered Networks and Psychological Well-being in a High Ability Sample: Preliminary Results

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**Keywords:** well-being, ego-centered networks, population density, fluid intelligence

*Background:* Li & Kanazawa [1] confirmed the already established relationship between socialization with friends and psychological wellbeing, yet also found that in highly intelligent people the relationship is reversed. They explained their findings with the Savanna Theory of Happiness (SToH), which claims that the human brain has difficulty dealing with situations that did not exist in the ancestral environment, and since living without regular contact with friends qualifies as such a situation, it decreases subjective wellbeing. Moreover, the more intelligent the individual, the more successfully her brain can cope with evolutionarily novel problems, hence the weaker the effect of a lack of friends on life satisfaction.

*Aim:* Our primary aim was to 1) replicate [1]’s finding that more intelligent people are more satisfied with life when meeting friends less frequently as well as 2) to critically examine its explanation, the SToH.

*Method:* We recruited volunteers from the Hungarian chapter of the high IQ society Mensa. Every participant had an age-standardized IQ score above the 98<sup>th</sup> percentile (i.e. above 130) on a fluid intelligence test (Raven’s Advanced Progressive Matrices, RAPM). In an online survey participants answered questions about their ego-centered networks. They subsequently filled a number of clinical and personality tests: the Brief Personality Inventory for DSM–5 (Brief PID-5)[2], BSI Brief Symptom Inventory [3], and the Well Being Index (WBI-5) [4].

*Results:* We did not replicate [1]’s finding: people in our sample of high IQ individuals experienced higher life satisfaction with a larger network of friends. Perspective taking and empathic concern did not predict subjective wellbeing, but empathic distress did correlate negatively. Additionally, empathic concern was negatively correlated with the population density of the participants’ place of residence.

*Conclusions:* Our preliminary results failed to replicate [1]’s findings. However, in [1] a test of crystallized intelligence (Peabody Picture Vocabulary Test, PPVT) was used, whereas our sample was selected with a test of fluid intelligence (RAPM). The authors of [1] nevertheless interpreted their finding along the construct ‘general intelligence’. While both the PPVT and the RAPM load highly on the general factor of intelligence, *g*, they arguably mea-

sure different broad abilities. In particular, while tests of crystallized intelligence (Gc) like the PPVT measure already acquired knowledge, tests of fluid intelligence (Gf) tap the ability to solve problems in novel situations [5]. Therefore, with SToH's focus on dealing with novelty, the RAPM is arguably better suited to test the theory, and our results seem to contradict it. As an extension of the study, we are currently collecting further data to examine the differential effects of Gf and Gc on the relationship between well-being and social interactions.

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## Connection, Confidence, Caring and Character as Predictors of PISA Math Achievement

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**Keywords:** PYD, math achievement, PISA

*Background:* Low academic achievement was found to be a key risk factor for early school drop-out, unemployment, substance use, and delinquency [1]. Positive Youth Development (PYD) as opposed to the deficit-based perspective is based on relational developmental system theory to promote youth strengths through the 5Cs: competence, caring, connection, confidence, character [2] as a function of interplay between individual characteristics and resources in youth contexts. As school is a significant developmental context of youth, we focus on a critical period for youth academic outcomes such as the transition from lower-secondary to upper-secondary education.

*Aim:* We investigate the relationships of the 5Cs and academic (math) achievement as measured in PISA (Programme for International Student Assessment) study and how these relationships tend to vary across school type and gender.

*Method:* The sample of students who participated in PISA 2015 (6,406 students, 2,901 girls and 3,505 boys, average age: 15.7 years) in Slovenia was invited for additional data collection approximately a year later. Of the total PISA 2015 sample, 2,802 students (1,460 girls and 1,342 boys) responded to the PYD questionnaire [3]. Multiple regression analysis was run on the merged PYD-PISA data.

*Results:* Findings revealed significant positive associations between character, confidence and math achievement in addition to significant negative associations between connection and math achievement. These associations also revealed variability by school types and gender.

*Conclusions:* PYD perspective [2] was applied for the first time in the Slovenian context to examine the relationships between math achievement as measured by PISA, academic achievement and positive outcomes. Results support the need for contextual understanding of factors that can promote academic (math) achievement. The implications point out to the need of designing promotive and protective PYD informed strategies to educational contexts that lead to school success in adolescence.

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## **Emotional Intelligence and Cultural Intelligence in Positive Psychology: The Mediating Effects of Organisational Culture, Role Conflict, Ambiguity, and Overload**

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**Keywords:** stress, culture, organisation, emotional, psychology

*Background:* The study examined psychometric and organisational predictors into the mediating effects of role stressors and organisation culture between emotional intelligence and cultural intelligence. The research was based on a number of overlapping theories that included the four factor model of cultural intelligence [1]; emotional intelligence theory [2]; role stress theory [3]; and organisational culture theory [4]; that embody factors that underpin the predictors of cultural values and perception within the threat and error management archetype [5].

*Aim:* The aim of the study centred on the influence of role conflict, ambiguity, and overload in cross-cultural and cross-border organisational environments to gain an understanding of the effects of role stressors between value systems, cultural adaptability and emotional competence constructs within work place and organisation to contribute to the positive psychology domain.

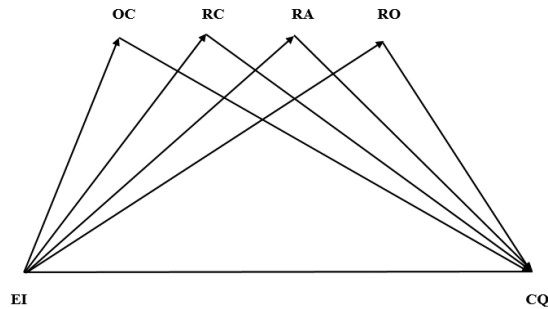
*Method:* Data were analysed from a sample of 429 participants across high-risk industries (e.g. natural resources, construction, transportation, healthcare sectors), based on country of birth in four countries i.e. Australia, United Kingdom & Northern Ireland, United States of America, and Singapore. Validated scales were used for all variables. Confirmatory Factor Analysis (CFA), Structural Equation Modelling (SEM) with descriptive statistics and correlations on all variables, Hierarchical Regression Analysis (HRA), Goodness of Fit measures and latent path coefficients, Sobel Tests with results Bootstrapped were used to determine the mediating relationships between variables.

*Results:* The results revealed that in cross-cultural and cross-border organisational settings: (i) role conflict, ambiguity and overload mediates the relationship between cultural intelligence and organisational culture; (ii) emotional intelligence is positively related to cultural intelligence, organisational culture, and role ambiguity; (iii) role ambiguity is positively related to cultural intelligence, organisational culture, and mediates the relationship between emotional intelligence and cultural intelligence.

*Conclusions:* The study has a number of implications for theoretical and professional practice that may extend the understanding of the relationship between cultural intelligence and organisational culture and the mediating role of cross-cultural role conflict, ambiguity, and overload in the positive psychology literature. The findings have practical implications



that imply cross-cultural role conflict, ambiguity, and overload will have a negative effect upon organisational culture that affect cross-cultural task performance. The findings contribute to positive psychology interventions in human resource development, task performance, and cultural and organisational behaviour theories that find place to enhancing applied positive psychology practice strategies within work and organisations.



**Figure 1.** Mediation model of organisational culture (OC), role conflict (RC), role ambiguity (RA), and role overload (RO) in the relationship between emotional intelligence (EI) and cultural intelligence (CQ).

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Appreciation to Rabdan Academy, United Arab Emirates; and Charles Sturt University, Australia; for supporting this international research.

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## Schneider Electric: Developing the Next Generation of Positive, Emotionally Intelligent Leaders Globally

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**Keywords:** positive psychology, neuroscience, strengths, leadership

*Background:* As global energy management specialists with 150,000 employees, Schneider Electric's purpose is to 'do more with less of the common planet.' As a leader, Schneider wanted to improve their culture, engagement scores, leadership and growth mindsets in their people. This was to create a positive climate to facilitate individual flourishing, collaboration, innovation and business improvement through exceptional leadership. Schneider introduced a company innovation program two years ago yet had a culture of stress, pressure and fear of failure.

*Aim:* To partner with Schneider Electric to embed a positive strengths-based leadership approach in order to drive engagement and productivity. To help Schneider Electric through a time of considerable structural and strategic change. To roll out programs focusing on transforming culture, engagement and leadership through the practical application of emotional intelligence (EI), positive psychology (PP) and neuroscience, in line with the company program of wellbeing and innovation.

*Method:* Based on the partnership with key Schneider Electric Pacific Zone employees, we created programs based on the practical applications of PP, EI and neuroscience. We supported these programs with a suite of interventions from frontline employees through to the senior executive team. These included evidence-based psychometric assessments, value workshops, team strengths sessions and Strengths Profile accreditations. Emerging leaders worked in project groups to solve real problems with the help of EI skills. They then presented their solutions and innovations to senior leaders. Importantly, the programs did not include standard 'leadership' training activities of decision making, strategy, planning and execution from a functional perspective. They were purely based on positive psychology tenets.

*Results:* As a result of the successful Pacific Zone partnership, wellbeing and a strengths-based approach has become integral to their 'Ignite' program. Supported by statistics from Glassdoor.com, an independent employees ratings site (see figures below), staff engagement is rising and disengagement is falling. 'Ignite' leaders have seen an increase in performance, promotional advancement, innovation and collaboration across the business despite ongoing organizational changes. Participants became more open, receptive, tolerant, resilient and better able to manage the frustrations that come from working in a large global organisation. They now have an innovation council, an innovation week, an award for 'best idea that didn't succeed', and have managed to change their culture from a fear of failure to a culture of innovation. Schneider are now expanding the programs into Asia and EMEA and were nominated as finalists for the AHRI Rob Goffee Leadership award. This proves that a large organisation embedding positive organisational scholarship through a positive strengths-based leadership

program, underpinned by neuroscience, EI and PP, can change culture, productivity, engagement and profitability.

*Conclusion:* Positive leadership can change the way people show up as leaders. Other organisations would benefit from these positive strengths-based leadership programs to increase engagement and shift their culture. We would like to share the learnings so other practitioners can understand what works, what does not, and show that putting research into practice is highly effective.

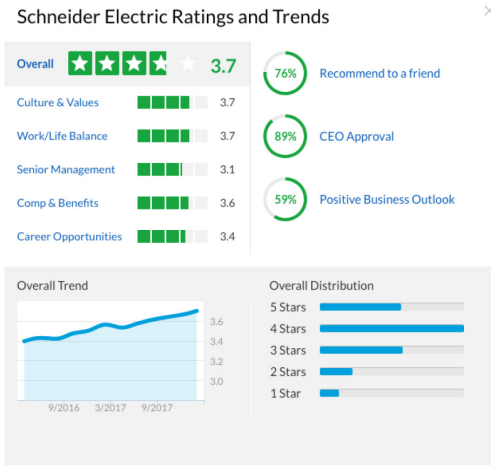


Figure 1.

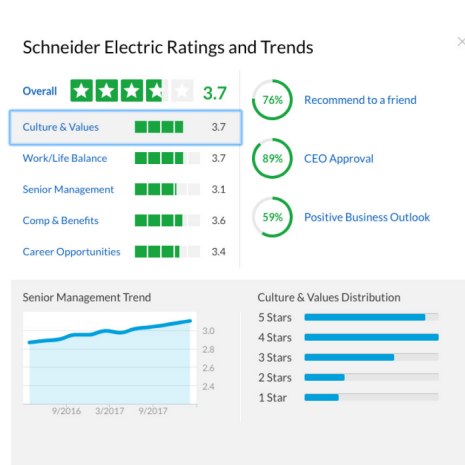


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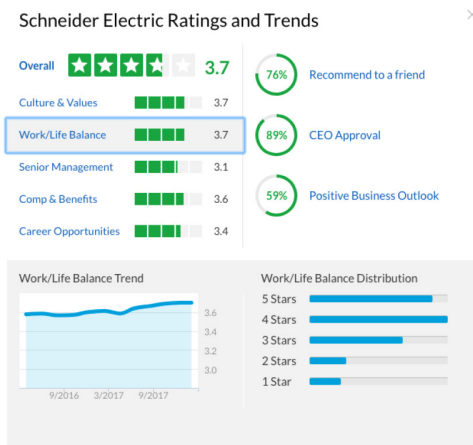


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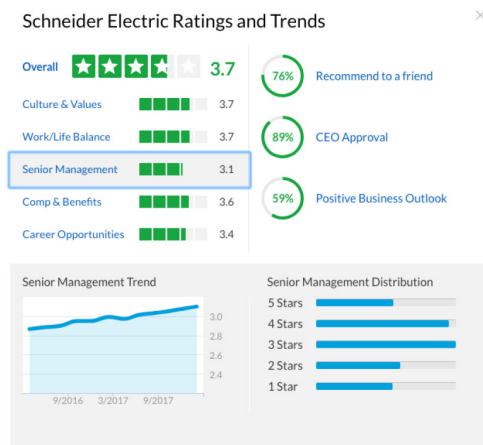


Figure 4.

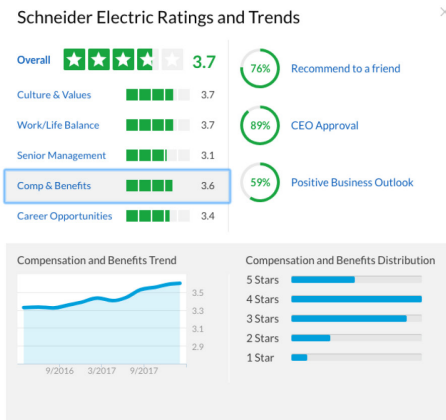


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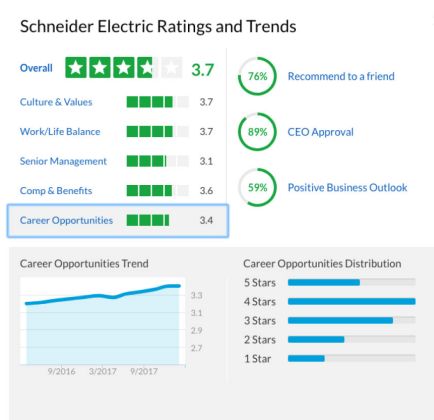


Figure 6.

## Acknowledgments

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## Promoting Post-Traumatic Growth with Conflict Mediation

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**Keywords:** post-traumatic growth, positive psychology, interpersonal conflict, restorative conflict mediation

*Background:* The inquiry of stressful life events has traditionally centred on medical diagnosis, loss of a loved one and accidents. The impacts of these adversaries were originally examined to understand the traumas they induce. More recently, they have begun to attract research attention due to the growth they trigger in some individuals. [1] Among traumatic events, interpersonal conflicts have emerged as a statistically alarming stressor in postmodern organizations, with severe negative influences on copying at work, mental and physical well-being and productivity [2]. However, tentative findings indicate that when conflicts are managed restoratively, they also elicit psychological processes that promote individual growth and organizational learning, which is why they take center stage in this paper [3].

*Aim:* This paper explores restorative mediation as a method for solving intra-organizational conflicts. In particular, it examines the change processes that this facilitative method triggers in individuals and teams. Where prior research has focused largely on the tangible mediation output, the agreement, the aim of this presentation is to deepen understanding of the mental process outcomes.

*Method:* The mental processes restorative mediation triggers are examined through disputant (n=42) perceptions from nine mediation cases by means of a qualitative survey. Content analysis of the survey responses seeks thematic categories describing the mental processes involved in mediation.

*Results:* The survey responses show that restorative mediation triggers seven types of process outcomes. They address relief, enhanced self-knowledge, motivation for self-growth, deepened understanding of communication, deepened understanding of team dynamics, gratitude to the mediator and gratitude for the mediation. It also temporarily induces frustration, anger and anxiety, but these coincide with the critical moments of transformation that inflict new understandings and are therefore elements inherent to the growth process [4].

*Conclusions:* This investigation shows that restorative mediation promotes important outcomes in individuals: disputant ownership of resolution enhances self-reflective ability and personal growth. Ownership can effectively be ensured with the facilitative approach, which also serves as an instrument promoting healthier team dynamics and more persisting organizational learning. Ultimately this study suggests that when assessing the success of conflict mediation, the focus be shifted from settlement to the longer-term psychological processes it triggers as they unleash positive psychological potential that benefits both individuals and teams.

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## **UPRIGHT Project: Universal Preventive Resilience Intervention Globally Implemented in Schools to Improve and Promote Mental Health for Teenagers**

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**Keywords:** health promoting schools, holistic intervention, youth, mental illness prevention, resilience

*Background:* Globally, one in five adolescents has at least one mental disorder in any given year. The most common are: anxiety disorders (31.9%), behavioral disorders (19.1%), mood disorders (14.3%) and substance use disorders (11.4%) [1]. Risk factors taking place during adolescence which may lead to mental health problems include social isolation, family conflict, stressful life events, emotional immaturity, academic failure, low self-esteem and poor body image as well as health risk behaviors (drug and alcohol use). Also, during the age span of 12 to 14 several changes occur that suppose an adaptation challenge, these being the biological transformations of puberty, the educational transition from elementary to secondary school, and the psychological shifts that accompany the emergence of sexuality.

Previous research supports the notion that resilience protects against the development of mental health problems despite existing risk factors. Resilience is a dynamic, multifactorial capacity by which the individual uses internal and external protective factors that lead to lasting positive effects on a range of educational, social and economic outcomes [2] despite risk.

*Aim:* UPRIGHT general aim is to promote mental well-being and prevent mental disorders by enhancing resilience capacities in youth; through a holistic approach addressing youth aged 12-14, families and education professionals, creating a mental well-being culture in schools.

UPRIGHT project will (a) develop a youth population-oriented intervention directed towards preventing the initial occurrence of a mental disorder, and promote mental well-being of adolescents aged 12-14, (b) implement the intervention in five European countries involving 30 schools, 300 teaching professionals, at least 5992 early adolescents and 5992 families, (c) assess its effectiveness in terms of improvement of mental well-being and school related outcomes and (d) estimate the cost-effectiveness of UPRIGHT intervention in mid/long term.

*Method:* Co-creation methods with end-users (youth, families and teachers) will be used to develop and adapt the core intervention to cultural particularities of each pilot site. A randomized trial by clusters design with two years follow up has been selected (intervention vs control schools per site). The intervention will be implemented twice in each school during three academic courses (see Figure 2). Qualitative and quantitative indicators will be collected at three time points. Predictive modeling methods will be used to estimate cost-effectiveness.

*Results:* A preliminary UPRIGHT theoretical framework has been delineated after a review of the literature and expert consensus. UPRIGHT is a holistic primary prevention intervention targeting adolescents, their teachers, their families and their whole school community. UPRIGHT intends to improve mental well-being of youth, identify resilience factors with evidence-based effects in promoting mental well-being in youth, reduce mental health symptoms reported by youth and provide guidelines and a web-based online program for the school community.

*Conclusions:* UPRIGHT project will be the first school based primary intervention program for adolescents that will create a real culture of promotion of mental health and well-being. Its innovation rests in its research design, consisting of a multidisciplinary approach and involvement of the young themselves and relevant stakeholders.



Consortium partners are symbolized by a pin. Pilot sites are symbolized by a school image.



Figure 1. European participating institutions and pilot sites.

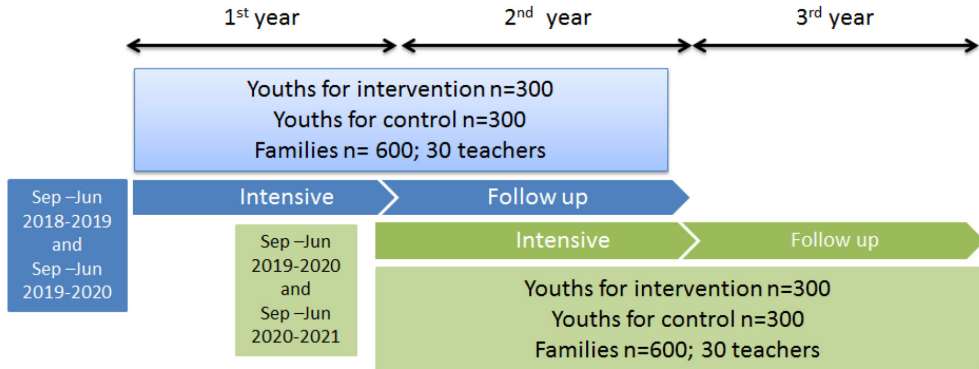


Figure 2. UPRIGHT intervention per pilot site

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**Disclaimer:** Any dissemination of results from UPRIGHT reflects only the author’s view. The European Commission is not responsible for any use that may be made of the information it contains.

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## Is There a Difference between Resilience and Posttraumatic Growth?

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**Keywords:** resilience, PTSD, PTG, trauma

*Background:* The literature points to conceptual confusion between resilience and posttraumatic growth (PTG) [1]. While resilience is defined as the retention of stability in the presence of stressors, PTG represents a cognitive change that follows trauma exposure [2, 3]. The few studies that have examined the relationship between resilience and PTG [1,4,5,6] have not found a clear pattern of association. In Levin's study [1] resilience was found to be inversely associated with growth. However, this study measured resilience as a lack of PTSD symptoms and did not implement a resilience assessment. Alim et al. [4] examined hospital patients who suffered from at least one traumatic incident. They did not find any association between growth and resilience. As in Levin's study, resilience was not measured by a resilience questionnaire but as absence of lifetime distress symptoms. Bensimon [5] found a positive association between growth and resilience. This study examined students who suffered from negative life events, however, traumatic events were not examined, which according to Tedeschi and Calhoun [2,3] is the trigger for PTG. In a study that examined growth among women survivors of childhood sexual abuse, a complex curvilinear relationship between resilience and PTG was found, the greatest growth occurred in moderate levels of resilience [6]. These findings highlight the need to further investigate the association between resilience and growth.

*Aim:* The current study examine the different roles played by resilience versus PTG in the functioning of mental health professionals (MHP) exposed to trauma both directly and indirectly through their work. Two groups of MHPs were included: 1) MHPs working in Sderot who were exposed to a massive rocket attack; and 2) MHPs working in Ashdod who had less exposure to rocket attacks.

*Method:* All MHPs working in Sderot (n = 50) and Ashdod (n = 52) were invited to participate in the study via a request sent to the local authority welfare managers. All professionals agreed to participate. Growth was measured by (PTGI) questionnaire [2]. Resilience was measured by The Connor–Davidson Resilience Scale [7].

*Results:* Our results indicated that MHPs working in the more severely affected community of Sderot reported higher objective, subjective, and professional exposure levels, as well as higher levels of PTSD and PTG, compared to the MHPs working in Ashdod. No differences were found between the groups in the level of resilience. A high level of resilience in MHPs working in Sderot was negatively associated with PTSD and positively associated with PTG. However, for MHPs working in Ashdod, resilience was not related to PTSD and was negatively associated with PTG.

*Conclusions:* The findings indicated that resilience acts differently in times of lower exposure to trauma than in times of higher exposure to trauma – when the level of exposure was high, resilience was positively associated with PTG, whereas when the exposure was low, resilience was negatively associated with PTG. It was also found that PTG depended on the level of distress and trauma while resilience did not. When trauma was high, the distress level was high and, hence, the possibility of the development of PTG will be higher, whereas resilience is a personality trait and does not depend on the level of trauma exposure.

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## Academic Pressure and Autonomy Support The Influence of School- and Individual-Level Factors on Academic Engagement: Using Hierarchical Linear Modeling Analysis

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**Keywords:** academic achievement, academic press, autonomy support, hierarchical linear modeling (HLM)

*Background:* Autonomy support is considered to be the most important factor in autonomous motivation development. In particular, support for autonomy of parents and teachers has a positive effect on academic engagement by enhancing intrinsic motivation of students and enabling high academic achievement [1]. On the other hand, the academic pressure is a representative variable of 'job demand' which causes students to experience serious academic stress and ultimately cause academic burnout [2]. In other words, academic pressure keeps students away from their study. A number of studies point out the serious academic pressure and stress in the Asian countries. Especially, according to OECD (2015), Korea is the 1st ~2nd in terms of academic stress and unhappiness of life for adolescents. That is, most Korean students are being oppressed without autonomy due to extreme academic achievement pressure and academic stress. Nonetheless, Korean adolescents ranked first in academic achievement by engaging their study actively. Therefore, this study investigates the relationship between the Korean students' perception of academic autonomy and academic pressure and the ironic relationship of academic engagement at the individual and school level.

*Aim:* The presented study goes beyond and investigation of the individual-level factors that affect academic engagement and includes an investigation of the school characteristic in terms of academic pressure (i.e. teachers' academic pressure and parents' academic pressure). Therefore, this study addresses two hypotheses linking individual-level (i.e. autonomy support of teachers and parents) and school characteristics of academic pressure to academic engagement. The hypotheses are as followings: Hypothesis 1. Higher levels of autonomy support from teachers and parents are associated with higher levels of academic engagement. Hypothesis 2. School characterized by high level of academic pressure (i.e. average of teacher's academic pressure, average of parents' academic pressure) has lower levels of academic engagement.

*Results:* First, the null hypothesis of no variance in the average academic engagement between the school was rejected, *chi-square* (7,  $n=8$ ) is 160.90,  $p<.001$ . In addition, in the results of the ANOVA test which contains no predictors, the amount of variance within schools was .52 and the between schools variance was .05. This implies that about 8.47% of the variance in academic engagement occurred between schools and there is significant between schools variance that can be modeled. Next, in the result of Level 1 (within-school), students who feel higher levels of autonomy support from teachers (.24\*\*) and parents (.14\*\*) have

higher engagement for their study. Furthermore, in the result of Level 2 (between-school), which was autonomy supports (level 1 variable) were controlled, schools with greater academic pressure from teachers (.50\*) had higher average students' academic engagement. In other hand, schools with greater academic pressure from parents (-.53\*) had lower students' academic engagement. Hypothesis 1, therefore, proved correct. However, Hypothesis 2 proved to be correct in terms of school level effect which is characterized by the relationship between parental academic pressure and academic engagement, whereas the relationship between teacher's academic pressure and academic achievement was found to be contrary to the hypothesis.

*Conclusions:* Considering these results inclusively, it suggests that leading the academic engagement of Korean adolescents was found to be the autonomy support of teachers and parents at the individual level, and the academic pressure of the teachers at the school level. Subsequent studies on level 1 and level 2 interactions are proposed when considering previous studies that job demand facilitates job engagement through interaction with job resources [3].

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## What Predict Self-Regulatory Ability?

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**Keywords:** self-regulatory ability, trusting parents of adolescents, self-efficacy

*Background:* Self-regulation is the ability to manage and control voluntarily self-desires, emotions, intentions and behaviors to set goals and plans. Self-regulatory ability is one of the essential trait for an individual to maintain a positive psychological state. [1].

*Aim:* The purpose of this study was to investigate the predictors of self-regulation ability. Specifically, it is examined the effects of parental trust and self-efficacy on self-regulation ability of adolescents in South Korea.

*Method:* Using survey method, the data was collected form 838 adolescents (437 females and 401 males) of middle and high school in South Korea. Korean version of the Volitional Components Inventory (VCI) developed by Yoon [2].was used to assess the self-regulatory ability of adolescents. Next, Korean Trust Inventory [3] was used to assess the trust in parents perceived by adolescents. Lastly, Korean Self Efficacy Questionnaire [3] was used to assess academic efficacy (the extent or strength of one's belief in one's own ability to complete tasks and reach goals of adolescent). A structural equation model analysis was conducted to find out the relationships among research variables with AMOS version 21.0.

*Results:* The major findings of current study were as follows. Parental trust had a significant positive effect on the self-efficacy ( $\beta = .64, p < .001$ ). Self-efficacy had a significant effect on self-regulatory ability ( $\beta = .70, p < .001$ ). Interestingly, parental trust had weak and negative significant direct effect on self-regulatory ability ( $\beta = -.14, p = .01$ ). That is, the parental trust was positively related to greater levels of self-efficacy, and in turn, greater self-efficacy was positively related to self-regulation ability. Interpretation of these findings suggests that the relationship between parental trust and self-regulation ability is accounted for, mostly, by perceptions of how confidently adolescents evaluate her/his ability. Additionally, the gender difference was founded on self-regulatory ability. Male students have higher scores on self-regulatory ability that female students.

*Conclusions:* The results of this study indicate that the school staffs including teachers and school counselors needs to consider self-efficacy to be important in trusting parents of adolescents and self-regulation ability, which intervenes the healthy or adaptive development of an adolescent. This study promotes understanding of self-regulatory ability of adolescents in South Korea and contributes to providing implications for the improvement of adolescents' self regulatory ability.

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## **The Limits of Hedonism and the Choice of a Purposeful Life With and for Others**

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*Learning outcomes:* Understanding the difference between pleasure-based and value-based life. Learning about the Greek notions of hedonism and eudaimonia, and its relevance for today. Identifying personal values, virtues and playfully creating a joint vision of a good life.

*Background:* The age of radical hedonism may have come to an end, it made us disappointed as individuals and as societies. The short-term fulfillment of egoist desires makes us isolated and leads to the overconsumption of resources on a global scale. The workshop provides an overview on how and why radical hedonism fails as a fundamental principle, and discusses the use of “eudaimonic” measure as a yardstick for individual and community action. This approach argues for a life based on purposeful action, with and for others, where happiness is not the direct purpose, but rather the “unintended” consequence of individual behavior. I will explain what we can learn from the Greek notions and practice of hedonism and that of eudaimonia, and how we can be inspired by them.

The Aristotelian approach is echoed and refined in the later works of Martin Buber, Paul Tillich, Viktor Frankl and many others. Recently, self-determination theory, the so-called “second wave” of positive psychology provide useful complementary approaches.

*Content:* After a short presentation of the core ideas, participants will have the opportunity to explore their own virtues, values, purposeful actions, interact with each other and create a joint vision of a good life, using psychodrama and action methods. My best hope is that it will be a valuable and inspiring time together, bringing joy and playfulness in connecting to this complex individual and social issue.

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## The Three A's of Personal Life Position: A New Inventory for the Assessment of Awareness, Agency, and Authenticity

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**Keywords:** personal life position, awareness, agency, authenticity

Is there a gap between human being and human life? Can one intervene in the multiplicity of factors influencing one's conduct and life cycle above and beyond all the objective and statistically significant predictors that can be reliably figured out? Lev Vygotsky [4] was probably the first scholar who distinguished natural, immediate, involuntary forms of conduct from higher, mediated and deliberate ones; nowadays distinctions of this kind are quite popular in dual-system models (W. Mischel, Ch. Carver, D. Kahneman).

However, while involuntary processes are universal and mandatory, deliberate regulations are optional and the power of their effects varies widely. Following E. Fromm [2] and V. Frankl [1], we consider self-awareness, self-transcendence and self-detachment the key prerequisites for an optional deliberate attitude to one's own life. The concept of personal life position (PLP [3]) refers to the attitude toward one's own life. One can be more or less aware of one's life as a whole (vs. being mindless about it); more or less capable of deliberately intervening in the course of one's life (vs. swimming with the stream) and feeling more or less harmony between oneself and the actual course of one's life (vs. sensing a discord between them). These three dimensions of PLP, awareness, agency, and authenticity, refer to its cognitive, conative and affective aspects, correspondingly.

Our long attempts to construct an inventory to measure the aspects of PLP recently yielded worthwhile CFA results (N=347): the most recent Russian-language version of PLP inventory (12-items) provided a good model fit with CFI=.960, RMSEA=.053; Cronbach alpha=.784 for the full inventory; for the three scales alphas ranged between .680 and .824. EFA also provided a good 3-factor solution fitting well to the theory and explaining 59.6% of variance. More validation data will be presented at the conference.

*Conclusion:* The personal life position inventory described above seems to be a promising instrument for research in positive psychology, especially related to existential issues. It allows addressing new types of research questions and hypotheses.

### Acknowledgments

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## Towards the Professionalization of Positive Psychology: Feast or Folly?

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**Keywords:** application in positive psychology, professionalization, feasibility and advisability

*Background:* Positive Psychology has made remarkable strides with the vibrant development of research and practice in recent years. Initially seen as a movement or a new paradigm and later as a sub-discipline in Psychology, it is now viewed by some as a separate, distinct discipline with an integrated body of scientific knowledge and specific practice applications. Questions are arising about its possible professionalization, especially from students trained in master degree programmes, and coming from diverse professional and training backgrounds. It is a question whether people with scientific and practical training in positive psychology should only apply it in their own professions or work contexts, or whether professionalization of positive psychology should be strived for ?

*Aim:* The aim of this presentation is to explore the current stance of Positive Psychology in South Africa and internationally and investigate the feasibility and advisability towards professionalization and guidelines for processes that may be taken.

*Method:* A literature review was conducted on national and international perspectives of Positive Psychology as an applied discipline and possible profession. Related scopes of practice were reviewed with a specific focus on scientific-based education (professional expertise); professional ethics and identity (professional awareness) and professional accreditation or regulation.

*Results:* Positive Psychology as a science and field of application is expanding and becoming increasingly more multidisciplinary and trans-disciplinary. A formal system of professionalization does not currently exist in South Africa or internationally. If Positive Psychology is to become a profession, whether applied in a disciplinary, multi-disciplinary or trans-disciplinary context, it should develop an agreed upon and unified body of knowledge, professional standards and qualifications, codes of ethics and behaviour, and regulatory processes where applicable.

*Conclusions:* Internationally acceptable standards and ethical guidelines for the application, and perhaps also professionalization of Positive Psychology are called for contributing to services being conducted on a scientific basis, professionally and ethically appropriate, with due regard to the needs and rights of those involved in the process for the good of others and the welfare of society. Whether the scope should be disciplinary, multi- or transdisciplinary needs further exploration and deliberation.

## The Flavours of Love: A Cross-Cultural Lexical Analysis

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**Keywords:** love, linguistics, lexicography, cross-cultural

*Background:* Linguists have often remarked upon the polysemous nature of love, whereby the term encompasses a wide diversity of emotional relationships. Several typologies have been constructed to account for this diversity. However, these tend to be restricted in scope, and fail to represent the range of experiences signified by the term ‘love’ in discourse.

*Aim:* In the interest of generating an expanded typology of love, encompassing its varied forms, an enquiry was conducted into relevant concepts found across the world’s cultures, focusing on so-called untranslatable words (i.e., those lacking an exact equivalent in a given other language, which in the present case is English). This enquiry is part of a broader search for untranslatable words relating to wellbeing (Lomas, 2016) – please visit [www.drtemplomas.com/lexicography](http://www.drtemplomas.com/lexicography) for full details.

*Methods:* A quasi-systematic search of relevant untranslatable words was undertaken – per the protocols developed in Lomas (2016) – involving peer reviewed academic publications, grey literature, and internet sources (e.g., blogs). The data (i.e., words and their definitions) were analysed using an adaptation of grounded theory.

*Results:* 609 relevant words were identified. These were organised thematically into 14 distinct types or ‘flavours’ of love (Lomas, 2018). The term ‘flavour’ is used to indicate that any given relationship might involve several of these types, producing a distinct ‘taste.’ These 14 flavours were in turn grouped into four broad categories of love: non-personal (i.e., for objects, experiences, and places); caring (i.e., nurturing, familial); romantic (i.e., passionate, sexual); and transcendent (i.e., overcoming narrow self-centredness).

*Conclusion:* The result of the analysis is an expanded theoretical treatment of love, allowing us to better appreciate the nuances of this most cherished and yet polysemous of concepts. More generally, the broader lexicographic project helps redress the Western- and English-centric bias of positive psychology, allowing for a more nuanced cross-cultural understanding of wellbeing.

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## The “Emotional Face” of Transformational Leadership: The Mediation Role of Emotional Intelligence and Affective Commitment on Efficiency

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**Keywords:** affective commitment, efficiency, group emotional intelligence, organizational commitment, transformational leadership

*Background:* The Transformational Leadership (TFL) approach is one of the most widely researched paradigms in the field [1]. In essence, suggests that leaders motivate followers to work beyond their own expectations and help them achieve high performance, inspiring high levels of involvement in the group. Moreover, the scientific literature shows that leaders can improve employees' performance and motivate them to make achievements beyond expectations and obligations [2, 3]. In fact, TFL has proven to promote Work-group Emotional intelligence (WEIP; [4]).

*Aim:* We propose that the “emotional face” of transformational leadership is mediated by Emotional intelligence and affective commitment. This mediational effect influences on the final perceived efficiency.

*Method:* In this research two studies were conducted. First, we adapted and analysed the psychometric properties of Teams Work Efficiency (TWG, [5]). 613 workers completed the 10 items for three dimensions: Team performance or the achievement of goals and performance, Quality of group experience related to social climate within the group and Team viability, referred to the adaptation to changes, solving problems, integrating new members and future working jointly. The final version replicated the authors' original model but discarded one item for team viability. TWG do not produce a global score. In a second study, 230 participants, members of 57 work teams, completed a questionnaire including: WEIP-S ([6], Alpha= 0.9), Affective Commitment (7 items from the Attributes of the organization scale, alpha= 0.79.) and TWG.

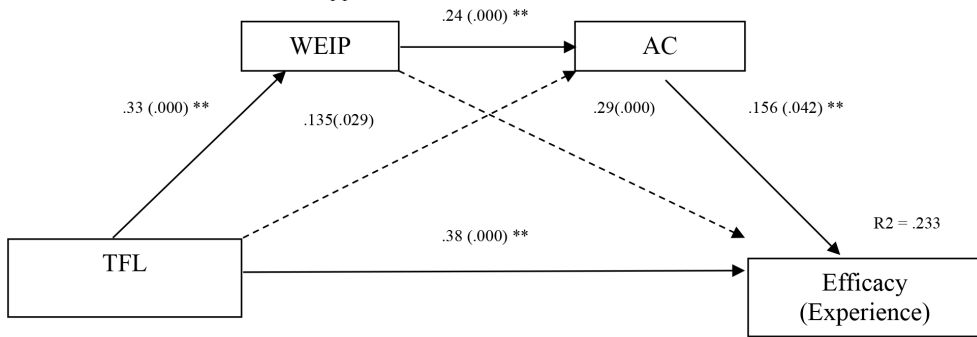
*Results:* The analyses revealed a positive and significant relation between transformational leadership, work-group emotional intelligence, affective commitment and each of the efficacy's dimensions, indicating that TFL is a core leadership style in performance and interpersonal relations. However, the mediational models reveal that the mediation of both work-group emotional intelligence and affective Commitment had a significant impact on Quality of group experience (see Figure 1) but not on team performance or team viability.

*Conclusions:* These results have a great impact on the notion of the “emotional face” of TFL, that is, this leadership style has a direct impact on efficiency and performance and this result is mediated by the group emotional intelligence that the leader promotes in the group but not by the affective commitment. However, the leader generates an affective commitment

making the group enhance the social climate which is positively related to team performance and team viability. Thus, leaders should consider that the emotional face could help in creating a good climate but this is not the last.

**Illustrations**

1. Indicate Illustrations here, if applicable.



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## Experiences of Beauty in Extreme Outdoor Wilderness

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**Keywords:** aesthetical experience, personal growth, positive emotions, eudaimonia

*Background:* While skiing in heavy snow and stormy weather: how does one identify momentary experiences that promote well-being? Taking Vittersø's Functional Well-being Approach (Vittersø, 2013), personal growth (PG) and satisfaction with life (SWL) are both necessary dimensions of well-being. Learning dynamics that influence PG and SWL help researchers understand complex qualities of eudaimonic well-being. Using a multidisciplinary approach to explore *aesthetic nature experience* (Evers, Fuller, Runehov, & Sæther, 2016), we tested a theory-based pilot questionnaire in the context of extreme wilderness.

*Aim:* To investigate experiences with strong emotional content in extreme weather conditions in order to identify qualities of aesthetic experiences in nature beyond typical interpretations of aesthetics that might occur with a beautiful view on warm and sunny days, etc.

*Method:* Based on the Day Reconstruction Method (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004), we followed a group of 27 outdoor leadership students (40.1% female) during a five-day wilderness adventure, reporting on one "strong experience of nature" every day (n= 93 experiences, 68.9%). As we were not aware of an appropriate questionnaire, we invented nine theory-based aesthetic questions. A mixed method approach was utilized, combining experience sampling (basic emotion state test, BEST) with narratives (Vittersø, Dyrdal, & Røysamb, 2005). Measures of personal growth (PG:curiosity, attention, absorption and competence) and satisfaction with life was included (SWLS: Pavot & Diener, 1993) before and after event .

*Results:* There was no significant differs at group level between SWL and PG before and after event. From the experience reports, there was correlations between both hedonic and eudaimonic feelings and aesthetical dimensions. For example, both "happiness" and "interest" correlate to experiences of *variations in nature* (happiness:  $r=.54$ ,  $p<.05$ , interest:  $r=.56$ ,  $p<.05$ ) and agreement of *beauty of nature evokes wondering* (happiness:  $r=.70$ ,  $p<.05$ , interest:  $r=.59$ ,  $p<.05$ ). Factor analysis of the pilot questionnaire captured three dimensions of aesthetic experiences. Based on the first factor, a new measure included five items, all with factor loadings  $>.7$ . This measure had a strong correlation with PG after the event,  $r=.59$ ,  $p<.05$  and with preferences for wilderness qualities in their chosen area for outdoor adventure,  $r=.71$ ,  $p<.01$ . The new five-item measure captures processes relevant for PG. These measures are discussed through narratives, semantic analysis and aesthetical theory.

*Conclusions:* In the context of cold, windy and wet weather, students' aesthetical experience is important to their PG. Their aesthetical experiences include variation, oneness, feeling at home, and wondering, both from experiences in nature and from experiences of beauty in nature. The aesthetic experience is discussed in a critical perspective to philosophical aes-

thetics for several reasons: 1) The aesthetical experience of nature needs a holistic approach and 2) The aesthetical experience of nature needs attention that is more academic. We contribute to theory development of aesthetic nature experiences, driven by empirical findings.

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## Too Cute to Be Bad – Baby Schema Effects on Evaluations of Immoral Behaviour and Aggression

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**Keywords:** social cognition, baby schema, cuteness, aggression, morality

*Background:* Humans - as other species - depend on adults' adequate behaviour towards the vulnerable young. The baby schema (i.e. infantile facial features) is an evolutionary marker for vulnerability [1], that is perceived as cute, elicits caretaking motivation [2] and supposedly inhibits aggression [3].

*Aim:* In two studies we investigated baby schema effects on the evaluation of children's transgressions (study 1) and aggressive behaviour towards dangerous individuals (study 2).

*Method (Study 1):* We asked participants to rate their reactions to several vignettes. Each vignette consisted of a portrait of a child with high or low baby schema and a description of a situation, in which the depicted child was being harmed by or harming another child.

*Results (Study 1):* As expected, high baby schema perpetrators were seen as less guilty and elicited less motivation to intervene compared to low baby schema perpetrators. High baby schema victims elicited opposite reactions: Perpetrators were seen as more guilty and the situation elicited a higher motivation to intervene.

*Method (Study 2):* We used a shooter-game – a modified version of the *Police Officer's Dilemma* [4], in which participants had to protect earth from an alien invasion. Participants were presented with more or less cute aliens, that were marked on their face as either threatening or harmless. The objective of the game was to "shoot" at threatening aliens and "don't shoot" at harmless aliens.

*Results (Study 2):* Analysis of Signal Detection Parameters indicated a significant bias not to shoot at cute targets. For correct trials, participants were slower at shooting at dangerous cute targets and quicker in deciding not to shoot at harmless cute targets compared to less cute targets.

*Conclusions:* Inhibition of aggression by infantile features has been described in animals and also hypothesized in humans. To our knowledge, this study presents the first direct experimental evidence for cuteness inhibiting aggressive behaviour in humans.

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## The Mediating Role of Psychological Capital in the Challenge-Hindrance Demands Framework: A Structural Equation Modelling Analysis

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**Keywords:** challenge-hindrance demands, psychological capital, nurses, private hospitals, Thailand

*Background:* Although the challenge-hindrance demands model and psychological capital are attracting widespread interest in the past decade, both of them are very young concepts that necessitate more empirical investigations to extend the theories (e.g., incorporating PsyCap into the model) that is applicable to the workplace [1].

*Aim:* This study examined the mediating role of PsyCap in the challenge-hindrance demands framework among registered nurses in Thailand which has been experiencing the shortage of nurses for decades [2].

*Method:* The total sample of 373 Thai registered nurses from six medium- and large-sized private hospitals (>101 beds) in Bangkok were recruited for this study. Data was collected using the Nursing Challenge-Hindrance Demands Scale, the Psychological Capital Questionnaire, the Utrecht Work Engagement Scale, and the Oldenburg Burnout Inventory. The Structural Equation Modeling (SEM) method was employed.

*Results:* The results revealed that PsyCap mediated the relationship between challenge and hindrance demands on the one hand, and work engagement, and burnout on the other ( $\chi^2/df = 2.70$ , CFI = .95, TLI = .94, RMSEA = .07, SRMR = .08). Specifically, the total effects of challenge demands on engagement and burnout were positive ( $\beta = .21$ ,  $p < .01$ ) and not significant ( $\beta = -.09$ ,  $p = .25$ ) respectively. In addition, the total effects of hindrance demands on engagement and burnout were negative ( $\beta = -.27$ ,  $p < .01$ ) and positive ( $\beta = .50$ ,  $p < .01$ ) respectively.

*Conclusions:* This work has highlighted that work stressors itself are neither good nor bad and only the parts of work stressors that are appraised as a barrier to work success cause troubles. When nurses encounter the stressful work condition that is too demanding to deal with and finally becomes a barrier to succeeding at work, their positive psychological attributes (e.g., self-efficacy) could unsurprisingly reduce and this is inevitably followed by higher burnout and lower work engagement. Conversely, when nurses encounter the stressful work condition that could be the opportunities to develop themselves at work, they not only acquire vital work skills, but also improve their psychological qualities (e.g., hopefulness) that are necessary for goal achievements and that is why they experience more work engagement. Therefore, the findings assure the mediating role of PsyCap in the relationship between positively and negatively appraised work environments and well-being in the nursing profession.

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## **Resilience Versus Organizational Citizenship Behavior as Mediators for Psychological Climate and Affective Commitment to Change**

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**Keywords:** psychological climate, resilience, OCB, affective commitment to change

*Background:* Organizational change is a must, and only can be achieved with people's support. Employee's commitment to change is necessary for every organizational change's program [1]. During the organizational change, the condition in the organization tends to be uncertain, and ambiguous, which make people insecure and even has the feeling of distress. Many types of research about organizational change have been conducted to identify what are the variables that enable to act as predictors of affective commitment to change. There are both external and internal individual variables that affect affective commitment to change, and one of the significant variables is people. People who have the competency and willingness to change. Resilience people can stand up from the condition of hopelessness when facing a problem [2]. People who have high organizational citizenship behavior are also assumed to have affective commitment to change, as according to [3], OCB and work meaningfulness is even stronger when role ambiguity occurs. In this situation, employees interested in searching for meaning and performing, and OCB may help provide this meaning. The conditions of the work unit are also necessary, as people who experience work meaningfulness will have experienced the feeling of more energized, and confident toward the organization, including attitude toward organizational change.

*Aim:* This research aims to identify the impact of resilience and organizational citizenship behavior (OCB) as mediators of the relationship between psychological climate and affective commitment to change.

*Method:* The respondents for this study consists of 355 employees chosen by convenience sampling from four financial institutions, two from banking and two from insurance companies which have conducted organizational changes. This study uses 4 (four) data collection tools: psychological climate inventory, resilience, OCB and affective commitment to change, and uses structural equation model (SEM) for data analysis.

*Results:* Findings show that there is a positive and significant impact of psychological climate on affective commitment to change with both resilience and OCB as mediators. Further, results also show that resilience has a higher effect on affective commitment to change compare with OCB. However, there is no significant correlation between psychological climate on affective commitment to change.

*Conclusions:* This result supports the substantial role in resilience and OCB on affective commitment to change, especially the critical impact of resilience in achieving the success of organizational change.

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## Life Meanings in Connection with Psycho-emotional Well-being in Adolescence

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**Keywords:** life meanings, psycho-emotional well-being

*Background:* Life takes some direction owing to the appearance of life meanings in adolescence. We assume that life meanings in adolescence interrelate with psycho-emotional wellbeing, which is considered in the theory-neutral approach [1] as an integral construct including personal, affective and cognitive (satisfaction) components.

*Aim:* The purpose of the study is to investigate the interrelation of main life meanings with different parameters of psycho-emotional wellbeing in adolescence.

*Method:* To study the meanings of life we used The System of Life Meanings technique (Kotlyakov). To examine the components of psycho-emotional wellbeing we applied The Scales of Psychological Wellbeing (Ryff), The Satisfaction with Life Scale (Diener), the satisfaction with different life spheres technique (the author's graphic scales), the technique for assessing stable emotional states (Nemchin, Kurganskiy). The study involved 131 adolescents (59 men and 72 women) aged from 13 to 17.

*Results:* The factor analysis revealed three types of meaning structures covering 62% of dispersion. Factor 1 Existential hedonistic meanings (22.7%) includes existential (0.70), hedonistic (0.82) and family (-0.74) meanings. Factor 2 Status meanings (20.4%) consists of status meaning (0.83) and altruistic meaning (-0.75). Factor 3 Self-improvement meanings (19.0%) has self-realization meaning (0.63), cognitive (0.60) and communicative ones (-0.74). The factors form correlations with the aspects of psycho-emotional wellbeing. Factor 1 correlates negatively ( $p=0.02$ ) to Satisfaction with Life. Factor 2 conversely has positive relations to satisfaction with studies ( $p=0.009$ ) and with life ( $p=0.032$ ). Factor 3 correlates negatively to Positive Relations ( $p=0.03$ ), satisfaction with communication ( $p=0.013$ ) and comfort state ( $p=0.01$ ); positively – to tension ( $p=0.05$ ).

*Conclusions:* Existential hedonistic meanings focus on obtaining pleasure, experience, searching for freedom while ignoring the importance of the family. They corresponds to reduced satisfaction. Status meanings focus on success and importance in society while ignoring altruistic values. They relate to high satisfaction with studies and life. Self-improvement meanings direct to self-realization and self-knowledge ignoring the values of communication. This meaning structure corresponds to reduced satisfaction with communication and increased emotional tension. So, presumably dominant life meanings compensate for the least fulfilled sphere of adolescents' life.

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## Does Awareness of Your Interests Make Life More Meaningful? – Examining Whether Autonomy Mediates the Relationship between Interest Awareness and Meaning in Life

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**Keywords:** meaning in life, authenticity, autonomy, self-knowledge, experimental

*Background:* Meaning in life (MIL) as the sense of coherence, purpose and significance in life [1] is connected to several key aspects of human wellness [2] and even to decreased mortality [3]. Thus it would be important to learn more about what makes life meaningful. Previous research has shown that a sense of autonomy [4], true self-concept accessibility [5] and perceived true self-knowledge [6] are connected to meaning in life. But beyond general knowledge about oneself, could increased awareness of one's self-expressive interests be connected to meaning in life?

*Aim:* The aim of this study was to test whether self-awareness about one's self-expressive interests is connected to meaning in life. Furthermore, we wanted to examine whether sense of autonomy would mediate this relation. We hypothesized that being aware of a larger set of activities where one is able to express oneself would be connected to higher levels of autonomy, as it is about a sense of volition and 'ownership' of one's own actions [7]. Being able to live autonomously and authentically, in turn, should be connected to increased sense of meaning in life [4].

*Method:* We invited 120 university students to take 4 minutes to write down as many activities as possible that they enjoy doing just for the sake of the activity itself. After this, they answered a brief survey with 5 items about their sense of meaning in life (MLQ-P scale [8]) and 4 items about their sense of autonomy in life (BNSFS scale [9]).

*Results:* The number of activities that participants were able to write down was correlated with their sense of autonomy (.252,  $p = .006$ ) and marginally correlated with their sense of meaning in life (.156,  $p = .092$ ). Furthermore, a mediation analysis conducted with the PROCESS macro in SPSS ([10]; model 4) showed that the paths from number of activities to autonomy ( $B = .0245$ ,  $SE = .0096$ ,  $p = .012$ ) and from autonomy to meaning in life ( $B = .590$ ,  $SE = .146$ ,  $p < .001$ ) were significant. The bootstrapping for indirect effects showed that while the direct effect between number of activities and meaning in life became insignificant (CI 95% [-.0236, .0369]) the indirect effect through autonomy was significant (CI 95% [.0036, .0310]).

*Conclusions:* The study provides evidence that the number of self-expressive activities people are able to write down is related to their sense of autonomy and marginally to their sense of meaning in life. Furthermore, autonomy seems to mediate the relation between number of activities and meaning in life. Currently we are conducting a second study that aims to replicate these results using a larger sample size and with two control conditions that allows us to more clearly examine the role of the type of activities people write down.

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## Not Negative Affect but Lack of Positive Affect Explains the Damaging Effects of Relationship Conflicts During Task Conflicts on Performance

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**Keywords:** workplace conflicts, negative affect, positive affect, flow, performance

*Background:* Workplace conflicts can have long-term negative effects for health and for several indicators of both job satisfaction and performance [1]. Yet, up to date the findings regarding the detrimental impact of one important type of workplace conflicts – task conflicts – on employee performance remain inconsistent [2]. Whether task conflicts are beneficial or detrimental for performance largely depends on the simultaneous occurrence of relationship conflicts [3, 4].

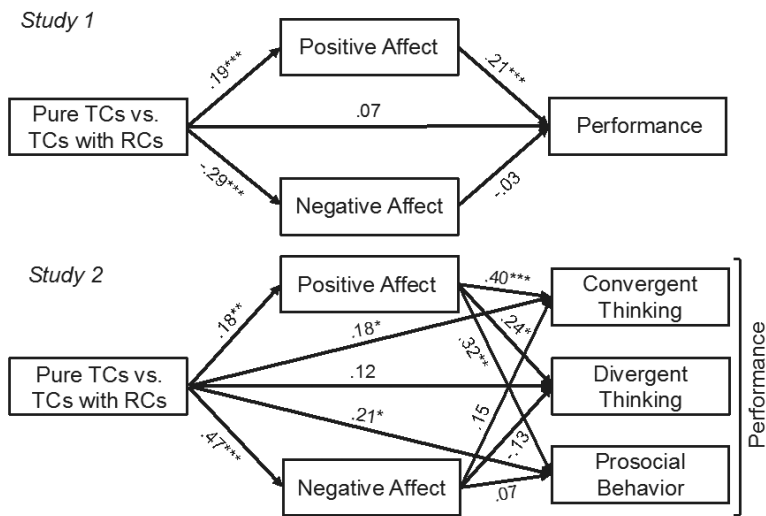
*Aim:* Our aim was to explore why task conflicts accompanied by relationship conflicts have more negative effects on performance than task conflicts alone.

*Method:* In contrast to most studies in this area, which rely largely on retrospective self-reports, we used event-sampling methodology to track task conflicts with and without relationship conflicts (Study 1) and examined these conflicts in a controlled laboratory setting (Study 2). Both methods allow for real time evaluations of task conflicts to gain a better understanding of the unfolding of task conflicts with and without a relationship component.

*Results:* Our findings highlight the importance of positive affect during workplace conflicts. New insights and information gained during task conflicts energized and activated employees, as they enabled learning and personal growth [5]. However, relationship conflicts during task conflicts hindered learning and destroyed the beneficial (stimulating) effects of task conflicts. This resulting lack of positive affect, in turn, explains why after task conflicts accompanied by relationship conflicts performance is worse than after task conflicts alone. Yet, neither of the two studies supported the assumption that the negative affect from relationship conflicts during task conflicts by itself had adverse effects on performance. The results are depicted in Figure 1.

*Conclusions:* The present research provides an important insight into the mechanisms by which conflicts at work can help or hinder performance and well-being. The strong coherence in findings across the very different designs suggests that the mechanisms revealed here are relevant for a wide range of conflict situations. Thus, our studies may help to develop potential starting points for interventions that prevent the negative and foster the positive consequences of conflicts at work.





**Figure 1.** Overview of the most important results from Study 1 and Study 2. Coefficients are standardized. TCs = Task conflicts. RCs = Relationship conflicts.  $*p < .05$ .  $**p < .01$ .  $***p < .001$ .

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## Characteristics and Conditions of Feeling Safe in the Moment: A Content Analysis of Safeness

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**Keywords:** safety, security, safeness, contentment, boredom, threat, protective resources

*Background:* Safety and security are understood to be fundamental for human thriving. For example, safety is seen as a basic human need [1], attachment to a caring figure gives rise to security [2, 3], and positive functioning on work teams is tied to psychological safety [4]. However, what it means to feel safe in the moment is less explored, with a few notable exceptions [5, 6]. It has not been established whether feeling safe is primarily a positive affective experience, what thoughts and appraisal may give rise to feeling safe, or how feeling safe may relate to other low arousal states such as contentment [6].

*Aim:* The aim of the current research was to identify characteristics and conditions of feeling safe in the moment, first by analyzing descriptions of feeling safe and then by comparing them to descriptions of other low-arousal states.

*Method:* Across three studies, adult participants residing in the United States were recruited from Amazon's Mechanical Turk (MTurk). In Study 1, 83 participants described a time they felt especially safe. Inductive content analysis was used to generate a coding scheme, which was then replicated in Study 2 on a sample of 118. Study 3 tested the coding scheme's usefulness in distinguishing between two other low-arousal states: contentment and boredom. Participants were randomly assigned to recall a time they felt either safe, content, or bored, describe what was happening at the time and what they were thinking and feeling, and rate the positivity of the recalled experience.

*Results:* Analysis of descriptions of feeling safe revealed that, in a large percentage of responses, some mention of remote threat was made, along with mentions of protective resources, such as shelter, family, and accomplishment. The following predicted results were found. Descriptions of feeling safe had more mentions of remote threat, as well as material and social protective resources, than did descriptions of contentment or boredom. Contentment had more mentions of psychological protective resources than feeling safe. The positivity rating and mentions of positive affective words were as high for feeling safe as for contentment.

*Conclusion:* Characteristics and conditions of feeling safe in the moment were identified after analyzing descriptions of feelings safe provided by residents of an affluent country at peace. Feeling safe was a positive experience, and a great diversity in the descriptions of feeling safe was observed. A model based on threats and protective resources was useful in organizing these differences. It is proposed that feeling safe in the moment involves the awareness of protective resources in the face of perceived remote or implied threat. With

such a model we can begin to explore the permutations of individual and contextual differences in feeling safe, in order to uncover effective strategies for fostering safe feelings in ourselves and for others.

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## Having or Being or Well-Being? Happiness and Materialism in the Consumer Child

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**Keywords:** children, well-being, materialism, consumption

*Background:* Children nowadays live in a consumer world, which emphasises the importance of ‘having’ rather than ‘being’ [1]. The ever-increasing attention towards material possessions seems to have negative correlations with well-being [2], which is to be considered as necessary in a properly balanced individual and social child’s development.

It is therefore mandatory to understand how children’s well-being, intended as a multi-dimensional phenomenon [3], is evolving in different moments of children’s lives and in different dimensions.

*Aim:* With the idea of giving importance to children as subjects [4], voicing their feelings and emotions about the world they live in, and focussing on what they are (children) rather than what they are going to be (adults), the present research investigates whether and how the child-consumer reports to be happy, and what are the dimensions, which actually weigh in his/her well-being. The study focusses also on materialism and tries to evaluate any correlations, existing between materialism and well-being.

*Method:* For the research, the Pemberton Happiness Index [3] investigating Remembered Well-being (made of General, Eudaimonic, Hedonic and Social Well-being) and Experienced Well-being, and the Youth Materialism scale [5] were administered to a sample of n=262 Italian primary school children (6.76 to 12.27 yrs.) considered as Children/Tweens and Male/Female, and their parents.

*Results:* Children resulted as generally happy (PHI=7.411, min 0 max 10). Remembered Well-being (8.264) is higher than Experienced Well-being (6.3718), Female Tweens (7.568) are happier than Female Children (7.321). Male Children (7.443) are happier than Male Tweens (7.345). Social Well-being (8.599) emerges as an important dimension. Furthermore, Females are more materialist than Males and Children more than Tweens. Happiness (-.198\*\*)—mainly in General (-.226\*\*\*) and Eudaimonic Well-being (-.175\*\*)—is negatively correlated with materialism.

*Conclusions:* Notwithstanding many pushes towards consumption and urges for materialism, children tend to be happy and their well-being is strongly connected with social relations, especially with family and peers. Indeed materialism is not important in children’s self-report, while it is present in the contingency of their behaviours and habits. Further research is needed as far as children are concerned, especially in school and family environments, and also especially as far as Social Well-being is concerned, whose importance can explain the severity of social problems as bullying and induce to reflect about the alarming tendency towards isolation in the present days.

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## **Fostering Employee Commitment Through Work Engagement: The Moderating Effect of Job Satisfaction in a Developing Country Setting**

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**Keywords:** work engagement, employee commitment, job satisfaction, Democratic Republic of the Congo

*Background:* Previous studies indicate that job satisfaction and work engagement are detrimental for competitive advantage and retention of employees [1]. Although past research has examined the effect of some work-related outcomes on employees' behaviours, the effect of job satisfaction on work engagement and organisational commitment is relatively understudied in the work-environment setting of the Democratic Republic of Congo [2]

*Aim:* This study examined the extent to which job satisfaction moderates the relationship between work engagement and perceptions of organisational commitment.

*Method:* A quantitative research approach following a cross-sectional research design. A sample of 839 employees in a railway organisation in the Democratic Republic of Congo completed [3]. The study sample consisted of 839 employees of a railway organisation in the Democratic Republic of Congo (DRC) (women = 38%). Perceptions of employees' job satisfaction were measured using the Job Satisfaction Questionnaire [3], their work engagement was measured using the Utrecht Work Engagement Scale [4], and their organisational commitment was measured using the Organisational Commitment Scale [5]. Data were analysed by applying hierarchical moderator regression analysis to predict employee commitment from work engagement, in interaction with the job satisfaction [6].

*Results:* The results indicated that the job satisfaction dimensions of pay, promotion, supervisor, co-worker, and work itself moderated the relationship between work engagement and employee commitment. Positive perceptions of job satisfaction and positive work environment would enhance employees' levels of energy, dedication, loyalty, and psychological attachment to the organisation.

*Conclusions:* This study found that employees who perceive a good rewards system, conducive working conditions, mutually trusting relationships with colleagues, and physical, emotional, and psychological attachment are more willing to exert effort in the interest of the organisation and show a strong desire to remain committed to the organisation. Higher level of job satisfaction significantly influenced employees work engagement and commitment.

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## Gender Differences in Forgivingness and its Correlates

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*Background and Objectives:* Women are generally believed to be more forgiving than men. However, the results of many studies comparing women with men vary. Some revealed greater willingness to forgive among female respondents [1], whereas other showed no relationships between gender and forgiveness [2]. Moreover, little is known about unique correlates or differential patterns of experiencing forgiveness by genders.

*Aim:* In the present study, we compared men and women in terms of their level of dispositional forgiveness and its emotional correlates, namely positive and negative affect, anxiety, and emotional control.

*Design:* We conducted a cross-sectional study.

*Method:* The sample consisted of 625 individuals aged 19-69, of whom 478 (76.5%) were women and 147 were men (23.5%). Polish versions of the Heartland Forgiveness Scale, the Positive and Negative Affect Schedule (PANAS), Courtauld Emotional Control Scale (CECS), and the State-Trait Anxiety Inventory were used. Positive and negative dimensions of forgiveness of self, of others, and of situations beyond anyone's control were considered.

*Results:* Although there was no significant difference in positive facets of the disposition to forgive, men showed higher level of general forgivingness and greater willingness to overcome unforgiveness than women. Women's dispositional forgiveness was negatively related to anxiety, negative affect, and emotional control, and positively associated with positive affect. In men, forgiveness was inversely correlated with anxiety, negative affect, and control of anger and of depression, while positively related to positive affect and control of anxiety.

*Conclusions:* The results revealed gender differences in the disposition to forgive, as well as unique relationships between different facets of the tendency to forgive and affect, anxiety, and emotional control across genders. Thus, optimum promotion of forgiveness interventions may be achieved differently in men and women.

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## Possession and Application of Character Strengths and their Association with Productive and Counterproductive Work Behaviors

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**Keywords:** character strengths, performance, citizenship behavior, deviance, procrastination, positive psychology

*Background:* Substantial amount of research has focused on relations of character strengths' possession and application with productive work behaviors (PWB; e.g., task performance, contextual performance, and work engagement) [1, 2]. However, their relations with counterproductive work behaviors (CWB) have rarely been studied [3]. Moreover, research on character strengths is scarce in Pakistan and under-represented in international studies.

*Aim:* The present study has following aims: 1) examine the degree to which the character strengths are endorsed and valued in Pakistan, and 2) examine the most important predictors of various dimensions of PWB (work performance and organizational citizenship behavior [OCB]) and CWB (deviance and procrastination) among character strengths as well as the application of signature strengths and culturally most valued strengths.

*Method:* The present study was conducted in two parts. In the first part, 55 participants (36 women, 19 men) with mean age of 33 years completed a survey which explored perceptions of society members about importance, development, and application of character strengths in Pakistan. In the second part, 197 employees (110 men, 87 women), having mean age 28.82 years and working for different companies in Pakistan completed measures of possession and applicability of character strengths, work performance, OCB, deviance and work procrastination.

*Results:* Spirituality, love, perspective gratitude, and love of learning were the five culturally most valued strengths in Pakistan. Honesty, fairness, kindness, leadership, and teamwork were the most strongly endorsed strengths. Results of multiple regression analyses indicated that possession of specific strengths and application of signature strengths were beneficial for high PWB and low CWB. For example, hope was an important predictor of work performance. Love, curiosity, and applied signature strength were prominent predictors of OCB. Strongest predictor for deviance was forgiveness. Fairness and prudence predicted procrastination.

*Conclusions:* The findings provide empirical evidence that possession and application of character strengths should be further researched in diverse work settings in specific context of Pakistan. Hope as a significant predictor of performance may characterize that the employees' expectation about best in future is especially important for their performance in a special context of a developing country having economic and industrial crisis. The finding that application of signature strengths is an important predictor of PWB is aligned with theoretical assertion that when individuals express their signature strengths, they perform at their best

[4]. The findings also hold practical implications for employees and organizations. Interventions aimed at fostering PWB can be designed to improve specific character strengths like hope and application of signature strengths as they are defined as malleable [4].

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## Personality and Flourishing among Young Adults from Central Europe and South India: A Cross-cultural Comparison

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**Keywords:** flourishing, personality, happiness, self-regulation, cross-cultural comparison

*Background:* Flourishing connotes the subjective perception of one's life going well. Recently, flourishing is a gaining currency as indicator of wellbeing. Studies have examined flourishing in different European countries, but research focusing on flourishing across different cultures are still very rare.

*Aim:* The present study aims at scrutinizing differences in personality traits and flourishing among both countries. Especially, we want to know which personality dimensions predict flourishing in the different cultures of Central Europe and South India.

*Method:* A sample of 205 (Males=96, Females=109) young adults from India and 209 (Males=37, Females=172) from Austria participated in this cross-cultural study. Personality was measured in terms of HEXACO dimensions [1]. Self-report measures of flourishing [2], happiness [3] and self-regulation [4] were also used. ANOVA was carried out to examine the differences between the two countries on personality and flourishing. Additionally, multiple regressions were used to identify the predictors of flourishing in the two different countries.

*Results:* Participants from Austria scored significantly higher on flourishing, conscientiousness and extraversion compared to those from India. Females scored higher than males on flourishing. The samples from the two countries did not differ on Honesty-Humility, Agreeableness and Openness to experience. Being female, extraverted and conscientious predicted flourishing in Indian sample, while personality and gender did not significantly predict flourishing in the Austrian sample. Finally, when controlled for gender, flourishing was positively correlated with self-regulation but not happiness in both Indian and Austrian sample.

*Conclusions:* We conclude that there appears to be significant cross-country differences in personality, flourishing and their associations. Further, we recommend mixed methods designs and experience sampling studies to examine the unique predictors of flourishing in different cultures.

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## The Effects of Competition on the Well-being of Recreational Runners

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**Keywords:** well-being, competition, sport, diary methods

*Background:* Recreational running is a popular form of exercise [1], and many recreational runners participate in organized races. Although regular exercise has been found to be associated with increased psychological well-being, the effects of competition on non-elite athletes (recreational runners) are not well understood. Also, research on relationships between well-being and competition suffers from numerous shortcomings [2], making it difficult to draw conclusions about the effects of competition on recreational runners.

*Aim:* The present study examined the impact of competition on the well-being of recreational runners. We expected that participating in organized races would be associated with increased well-being.

*Method:* Participants were recreational runners ( $n = 244$ ) who maintained an online diary. At the end of each week for three months they described their psychological well-being: self-esteem, life satisfaction, self-efficacy, meaning in life, and affect and indicated if they had participated in an organized race that week.

*Results:* We analyzed data for 2379 weeks, of which 660 included an organized race ( $M = 2.1$  races per person,  $SD = 2.42$ ; once a month). Multilevel modeling analyses (weeks nested within persons) found that participants' well-being was higher during weeks when they competed than during weeks in when they did not for all measures of well-being except anxious affect (no difference). For all outcomes except self-efficacy participating in a race had less of an influence on well-being for more experienced runners than it had for less experienced runners.

*Conclusions:* Participating in an organized race led to increased well-being for recreational runners. We believe that this occurred because such participation represented goal achievement. For many recreational runners their most important goal is to finish. Their times are less important than finishing, although time may become more important as runners become more experienced.

### Acknowledgments

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## **Integrating Service Learning, Positive Psychology and Outdoor Adventure Education**

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**Keywords:** giving, meaning, wellbeing, outdoor education, students

*Background:* In recent years, there has been a call for integration between the fields of experiential education and those that share common philosophical roots, such as service-learning and positive psychology. Here, recent studies integrating service learning, positive psychology, and outdoor adventure education have acknowledged the compatibility of positive psychology for studying student outcomes.

*Aim:* The present study aimed to examine if an outdoor education program designed to expose students to intentional activities promoting positive feelings, positive behaviours, or positive cognitions (e.g., being in nature, gratitude, giving, meditation) through a unified educational philosophy can enhance existing outdoor adventure education programs and practices, and promote wellbeing and meaningful happiness in students.

*Method:* As part of a two-week outdoor education expedition, 18 high school and college students (11 males and 7 females) were engaged in evidence-based wellbeing activities, such as journaling, three new gratitudes, and meditation. A concurrent mixed methods approach was used with wellbeing measured qualitatively via interviews and journals, and quantitatively using the Flourishing Scale (FS) across four time points. Qualitative data was coded for main themes and a paired-samples *t*-test was conducted to evaluate the impact of the wellbeing activities on student's FS scores.

*Results:* Qualitative data showed that the incorporation of wellbeing activities facilitated students' connection and gratitude towards nature, promoted self-reflection, and a shift in values and worldviews toward social concern. Quantitative data showed a statistically significant increase in FS scores from pre-trip ( $M = 46.11$ ,  $SD = 3.27$ ) to post-trip ( $M = 48.89$ ,  $SD = 4.17$ ), with a large effect size (.39).

*Conclusions:* The results of this in-depth case study support the growing body of literature showing that forms of altruism performed regularly are beneficial to wellbeing and meaningful happiness and provide a fruitful pathway from which to consider the enhancement of existing curricula for student wellbeing.

### **Acknowledgments**

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## Psychosocial Health Mediates the Gratitude- Physical Health Link

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**Keywords:** gratitude, perceived stress, loneliness, physical health, mediation

*Background:* Cross-sectional, longitudinal, and experimental research consistently demonstrate that gratitude is linked to characteristics of better psychological and relational/social health. There is now a growing body of research demonstrating that gratitude also serves a protective and predictive role in self-reported physical health. An important next step is to establish the causal and theoretically driven mechanisms explaining this gratitude-health relationship. With research establishing *if* gratitude is linked to physical health, much work is also needed to determine *how* they are linked.

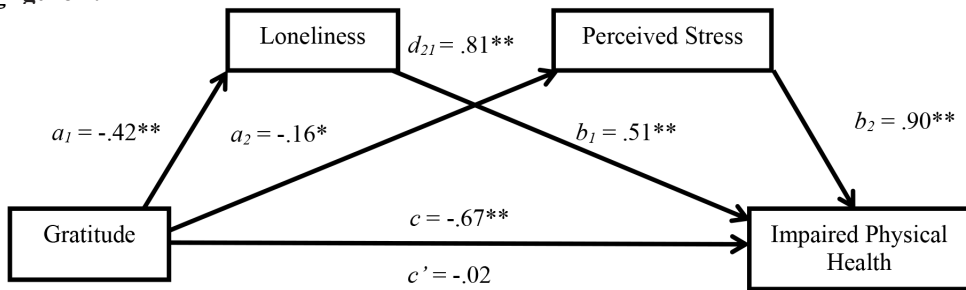
*Aim:* The present study examines the relationship between dispositional gratitude and self-reported physical health symptoms, and explores whether this relationship is explained through reduced levels of perceived loneliness and stress.

*Method:* A convenience sample of 790 people completed this online cross-sectional study. The primary outcome was self-reported somatic symptoms, with perceived loneliness and stress serving as mediators. Data was analysed using the PROCESS macro (version 2.16) for SPSS [1].

*Results:* Gratitude significantly predicted fewer physical health symptoms (sleep disturbances, headaches, respiratory infections and gastrointestinal problems). Serial mediation analysis revealed that the positive effect of gratitude on physical health was significantly mediated by lower reported levels of perceived loneliness and stress. Overall, this model accounted for 37.8% of the variance in physical health,  $F(3, 603) = 121.9, p = .0001$ .

*Conclusion:* These findings support evidence advocating that gratitude be cultivated, and provides preliminary support for the notion that gratitude may be a beneficial psychological resource to include in health interventions that target social relationships and stress. Indeed, if gratitude protects people from adverse effects of stress, through reducing loneliness, then increasing gratitude through intervention may accrue psychological resources that will be beneficial for people's health and wellbeing throughout their lives. Given the nascent state of research examining how gratitude may promote physical health, the current study provides much needed insight, evidencing that subjective psychosocial health, in the form of loneliness and perceived stress, serves as an underlying mechanism through which gratitude predicts physical health symptoms. These findings are important given evidence that gratitude can be cultivated, and may serve to buffer stress and improve somatic health symptoms in the general population.

**Figure 1.**



Serial mediation model showing the sequential mediation effects of loneliness and perceived stress on the association between gratitude and physical health. Unstandardized coefficients ( $B$ ) are presented.  $^* = p < .001$ ,  $^{**} = p < .0001$ .

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## Developing a New Test of Mental Health, MHT, with Five Sub-Scales

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**Keywords:** mental health, flourishing, global wellbeing, savoring, psychological immunity

*Background:* One of the mission of positive psychology is to develop valid theory and measurement tool of mental health. According to our theory mental health means a biological, psychological, social and spiritual well-functioning, a capacity to maintain positivity with an effective coping and savoring tandem together with resiliency and dynamic self-regulation. This theory enriches the concept of flourishing (feeling good and functioning well) with those capacities (coping, savoring, resiliency, dynamic self-regulation, psychological immunity) which generate mental health.

*Aim:* In the lecture operationalization and a new measurement tool of mental health (MHT) will be presented.

*Method:* In an online questionnaire study there were applied 34 items from five areas of mental health: Global and subjective well-being (G); Savoring (S); Creative, executing individual and social efficiency (CE); Self-regulation (SR); and Resiliency (R). In addition, the questionnaire included seven socio-demographic variables (gender, age, level of education, family status, number of children, financial status, and occupation) and two questions about physical and general health status.

Subjects were 554 adult persons (160 males, 394 females).

*Results:* Based on the 34 items we tried to create a test with the above five dimensions (G, S, CE, SR, and R). To achieve this goal we applied item analyses, explorative factor analyses (MLFA followed by a Promax rotation), and confirmative factor analyses, consecutively dropping from a five-factor model the badly fitting variables. In the end we obtained 15 items in five scales (with 3, 2, 3, 2, and 5 items respectively) with the following adequacy measures in the three statistical methods:

Item analysis: Cronbach alpha values all above .70 (.849; .708; .753; .788; .810).

EFA: KMO = .851; all communalities above .35.

CFA: RMSEA = .052 < .06; C90 = (0,043; 0,061); pClose = .351 > .05; SRMR = .046 < .08; CFI = .952 > .95; TLI = .940 > .90;  $\chi^2/df = 2.49 < 3$ .

In terms of external validity the following results were obtained (only significant results at  $p < .01$  level are mentioned). 1. Males are better in SR (Cohen  $d = .29$ ), women are better in S ( $d = .50$ ). 2. Age correlates positively with SR ( $r = .20$ ) and R ( $r = .24$ ). 3. Education level correlates positively with G ( $r = .15$ ), SR ( $r = .15$ ), and R ( $r = .24$ ). 4. Financial status correlates positively with G ( $r = .17$ ), and EC ( $r = .12$ ). 5. Number of children correlates positively with SR ( $r = .16$ ), and R ( $r = .21$ ). 6. Married persons have higher G ( $d = .53$ ) and R



( $d = .56$ ) means than those who are single and have also higher SR ( $d = .37$ ) and R ( $d = .34$ ) means than those who live in a non-married relationship. However, these latter have a higher G-scale mean than those who are single ( $d = .47$ ).

*Conclusion:* All criterion measures are acceptable. This confirms that MHT can be characterized with high reliability and internal validity. External validity results show that MHT is a new promising measurement tool for diagnosing mental health.

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## Evaluating the Psychometric Properties of the Psychological Ownership Questionnaire

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**Keywords:** self-efficacy; self-identity; belongingness, accountability, measurement invariance

*Background:* Psychological ownership has recently emerged as a positive psychological mechanism that meets the recognised positive organisational behaviour criteria: it is based on theory and research, can be measured, is open to change and development and affects the performance of organisations [1]. Psychological ownership is defined as “the state in which individuals feel as though the target of ownership or a piece of that target is theirs,” and reflects “an individual’s awareness, thoughts, and beliefs regarding the target of ownership” [2]. Over the past decade a significant body of research has examined the effects of psychological ownership on favourable employee attitudes and behaviours. It is thus important to ensure that the measures used to assess psychological ownership are valid and reliable.

*Aim:* The purpose of this study is to examine the psychometric properties of the multi-dimensional Psychological Ownership Questionnaire (POQ) [3] within the South African context.

*Method:* A cross-sectional survey research design was employed coupled with a convenience sampling strategy ( $N=953$ ). First, the *factorial validity* of the POQ was estimated through a confirmatory factor analytic. Structural equation modelling (SEM) was employed to assess the model fit of both the measurement and structural models employing several fit indices. Second, the *reliability* of the POQ was assessed. Third, *measurement invariance* was investigated based on the age of participants. Finally, *convergent validity* was estimated to determine if the POQ is related to turnover intention.

*Results:* The results showed that the five-dimensional factor structure of the POQ could be confirmed and showed no configure, convergent and metric invariance between different ages. The instrument proved to be reliable at both a lower (Cronbach Alpha) and upper level (Composite reliability) limit within South African organisational contexts. Finally, convergent validity was proven through relating the POQ to turnover intent.

*Conclusions:* The POQ has proven to be a useful, valid and reliable self-report questionnaire for the assessment of psychological ownership within the South African organisational context.

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## Leadership Toolbox

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**Keywords:** leadership, work, organization, development

*Background:* Leadership is a relational skill; it is about how we interact with and relate to others

*Aim:* Becoming a leader from an engineering background can be rather challenging especially from this perspective, but the way we relate more effectively as leaders can be learned and improved.

*Method:* Taking a non-deterministic approach we created a framework for personal and team development that supports many leaders at many stages of their careers in growing in to a more conscious, more relational, and more successful leader, enabling others to create real business value. The Leadership Toolbox is a set of simple and practical tools that has the potential to become part of leaders' everyday life. We expect that those tools transforming into habits and best practices, applying the principles of growth mindset, will help every leader to grow and lead effective teams with happy people.

*Results:* The tools are structured in four categories suggesting a development path from creating self-awareness to growing people and developing teams, increasing motivation, engagement and supporting retention. Each and every one of us has some tools that we use, but are we sharing these? In this presentation Peter will give you an insight into his personal journey developing as a leader and introduce you to the concept of the Leadership Toolbox.

## The Humble Leader: A Study to Investigate the Perceptions of Humility in Leadership

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**Keywords:** humility, leadership, implicit, explicit

*Background:* Despite agreement that humility is viewed as a general strength, research concerning humility's place in leadership is somewhat divided [1].

*Aim:* The current research aimed to identify the perceived desirability of humility in leadership, with particular focus on relational and intellectual humility.

*Method:* Study 1 (N = 25) developed 4 vignettes portraying leaders of differing humility. Participants read all vignettes and rated leaders using the warmth/competence scale [2]. Study 2 (N = 64) examined the impact of the vignettes on perceived humility using the relational humility scale [3] and the intellectual humility scale [4] in a between participants design. Study 2 also examined the implicit associations between humility and status. Study 3 (N = 140) explored the moderating influence of participant's own humility on the relationship between leader humility and perceived effectiveness.

*Results:* Results revealed that: (1) Humility is a desirable strength in leaders, with humble leaders rated as significantly warmer, more competent and more effective than arrogant leaders, however, IAT scores revealed that participants associated humility with low-status roles rather than high-status roles. (2) Participants did not significantly prefer intellectually humble leaders over relationally humble leaders. (3) Participant's own humility significantly moderated the relationship between leader's humility and perceived effectiveness, with humble participants rating humble leaders as more effective, and arrogant leaders as less effective than arrogant participants.

*Conclusions:* The current research provides clear and direct support for the notion that humble leaders are viewed as more desirable, competent, warm, and effective than arrogant leaders and that this is moderated by an individual's perception of their own humility.

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## Strategies for Supporting Learning and Well-being Experiences for Disadvantaged Students

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**Keywords:** disadvantaged students, supportive teaching practices, wellbeing

*Background:* Disadvantaged students often have complex social, emotional, and family circumstances that can affect their wellbeing and learning experiences [1,2]. These students require supportive learning environments where specific strategies to enhance their wellbeing and learning are used [3]. In practice, however, there has been little work undertaken to fully understand the specialized wellbeing and learning needs of disadvantaged students.

*Aim:* The aim of this research was to explore strategies used by teachers to foster the development of positive learning environments for disadvantaged students. Specifically, how do teachers working with disadvantaged children create a) supportive learning environments and b) foster social and emotional wellbeing?

*Method:* To address these questions 25 teachers working at a disadvantaged secondary school worked in groups of 4-8 individuals to complete “system maps” visually depicting ideas, open-ended questions, and engage in focus group discussion. These sessions were facilitated by the last two authors. Results were thematically coded and inductively analysed using NVIVO.

*Results:* Key strategies for fostering student wellbeing used by teachers included using sensitive communication when managing potentially embarrassing situations, and facilitating social connections. Strategies for supporting learning included encouraging persistence, and teaching to student interests. Issues which address fundamental human needs such as food, shelter and safety, were seen by teachers as supporting both wellbeing and learning.

*Conclusions:* Teachers clearly articulated the interdependent nature of fostering wellbeing and learning. This finding highlights the fundamental role of student wellbeing underpinning learning; “absolutely, that comes first, because without that harmony within them, they are not going to learn anything” (Secondary School Teacher).

### Acknowledgments

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## Motivational Profiles of Character Strengths

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**Keywords:** intrinsic motivation, extrinsic motivation, character strengths

*Background:* The concept of character strengths is quite popular in positive psychology. The *Values in Action (VIA) Classification of Strengths* describes 24 positive traits [2] with numerous studies showing that knowledge and exercise of one's strengths are consistently positively related to individual fulfillment, satisfaction, and happiness indicators. However, different strengths exhibit different patterns of association with well-being indicators: some strengths may be directly associated with activities providing intrinsic enjoyment, whereas others may lead to satisfaction as a result of social rewards [1]. However, according to *Self-Determination Theory* of human motivation, the behaviors supported by autonomous intrinsic and extrinsic motivation are expected to have more positive well-being consequences, compared to those controlled by external or internal rewards [3]. The present study is a first attempt to apply the Self-Determination Theory approach to character strengths.

*Aim:* We aimed to explore the motivational profiles of character strengths.

*Method:* 314 students of the University of Missouri completed an online self-report questionnaire. The respondents were provided with brief descriptions of the 24 VIA strengths and asked to evaluate the degree of each strength in their own personality and in comparison to their peers, as well as the use of each strength in the past week. To assess their motivation, the students were asked to rate 4 reasons for using each strength representing *external*, *introjected*, and *identified* variants of extrinsic regulation of behavior, as well as *intrinsic motivation*. To quantify the perceived locus of causality for each strength we calculated the Relative Autonomy Index (RAI) [4].

*Results:* The motivational ratings of the 24 strengths were internally consistent (Cronbach's  $\alpha$  ranged from .70 to .86 for the 4 mean-centered motivation items), as well as strength self-ratings based on 2 items ( $\alpha$  in the .60-.85 range). Exploratory factor analysis of strength self-ratings revealed 4 groups of strengths labelled *Interpersonal*, *Spiritual*, *Cognitive*, and *Willpower* virtues. Although, on average, strengths were predominantly autonomously motivated, there were notable differences in motivation profiles ( $\eta^2_{\text{partial}} = .12$ ,  $p < .001$ ) across strengths represented by their RAI scores in Table 1. Exploratory principal component analysis of RAI scores with a subsequent Varimax rotation showed that cognitive strengths were mainly intrinsically motivated, whereas willpower strengths, as well as some spiritual (except *Hope*, *Zest*) and some interpersonal (except *Love*, *Humor*) ones tended toward controlled motivation.

*Conclusions and future perspective:* The findings show that strengths do indeed exhibit different motivation profiles, suggesting that exercise of strengths may have different consequences for well-being. We are going to extend these findings by conducting a cross-cultural comparison.

**Table 1.** Motivation Profiles of Character Strengths – Factor Loadings (Varimax normalized; extraction: Principal components). Marked loadings are  $>.40$ .

Strengths of Character	Virtues	RAI	Factor loadings	
			Controlled strengths	Autonomous strengths
Appreciation of beauty	Cognitive	2.81	0.17	<b>0.71</b>
Bravery	Spiritual	1.23	<b>0.53</b>	0.20
Citizenship	Interpersonal	0.91	<b>0.70</b>	0.05
Creativity	Cognitive	2.54	0.10	<b>0.70</b>
Curiosity	Cognitive	3.26	0.08	<b>0.78</b>
Fairness	Interpersonal	1.31	<b>0.76</b>	0.16
Forgiveness	Interpersonal	0.65	<b>0.72</b>	0.10
Gratitude	Interpersonal	1.78	<b>0.66</b>	0.32
Hope	Spiritual	2.58	0.30	<b>0.58</b>
Humor	Interpersonal	3.39	0.18	<b>0.72</b>
Integrity	Interpersonal	1.33	<b>0.68</b>	0.33
Judgment	Cognitive	1.80	0.40	<b>0.53</b>
Kindness	Interpersonal	2.30	<b>0.60</b>	<b>0.44</b>
Leadership	Spiritual	1.54	0.38	0.38
Love	Interpersonal	3.27	0.37	<b>0.59</b>
Love of learning	Cognitive	2.36	0.15	<b>0.66</b>
Modesty	Interpersonal	1.74	<b>0.67</b>	0.31
Persistence	Willpower	1.45	<b>0.52</b>	<b>0.45</b>
Perspective	Cognitive	2.44	0.40	<b>0.59</b>
Prudence	Willpower	0.83	<b>0.64</b>	0.18
Self-regulation	Willpower	0.88	<b>0.64</b>	0.16
Social intelligence	Spiritual	1.92	<b>0.49</b>	<b>0.41</b>
Spirituality	Spiritual	1.22	<b>0.47</b>	0.30
Zest	Spiritual	2.55	0.31	<b>0.63</b>

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## **Health-Promoting Lifestyle and the Problem of “Recovery” in Professional Activity: Age Aspect**

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**Keywords:** health-promoting lifestyle, physical activity, psychophysiological potential, students, adulthood

*Background:* In modern psychological science there are few studies of healthy lifestyles among people who do not have health problems. However, this issue is topical and important, since this category of people can constitute a group of psychological risk, because such people can be more careless about their health before the appearance of severe symptoms of the disease.

*Aim:* An important research task was to study the relationship between the parameters of a health-promoting lifestyle and behavior that promotes the recovery of potential in the context of professional activity in different periods of adulthood.

*Method:* Health-Promoting Lifestyle Profile (HPLP)» [1]; survey, developed for the study of the health-protective behavior; questionnaire “Factors of professional development”. Participants: 402 adults aged 17 - 60 were divided into four age groups: 17-21; 22-29; 30-44; 45-60.

*Results:* Comparative analysis revealed differences in the expression of health-promoting lifestyle parameters in groups: in students (17-21 years) had scores below the average, in the second group (22-29 years) scores were above the average, in 3d group (30-44 years) and 4th group (45-60 years) – there was average severity. Significant differences in some parameters of HLS were revealed: participants of the 2d and 4th groups put greater importance for food culture. The parameters "internal growth" and "interpersonal relations" were expressed in the 1st and 2d age groups (17-21 years and 22-29 years). The greatest expression of "stress management" was noted in representatives of the 2d, 3d and 4th groups. The results of the regression analysis showed that the predictors of the professional functioning factor "recovery" were: "physical activity" in all four groups, in the 1st group the parameter "internal growth" was added, in the 2nd and 3d - stress management, in the 4th - interpersonal relations.

*Conclusions:* The study revealed level differences in the overall indicator of HLS in age groups. Significant differences in parameters were shown for: "nutrition", "internal growth", "interpersonal relations" and "stress management". We identified characteristics of healthy lifestyle, specific for each age period. The important role of the psychological factors within the Walker (1996) Health-Promoting Lifestyle Profile (HPLP) model was confirmed.

### **Acknowledgments**

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## Employee Satisfaction in the Siberian Region

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Phenomenon of job satisfaction is one of the indicators of the social well-being of the employees. Hypothesis of our research: Measurement of employees satisfaction in the organization allows to determine the structure of the motivation of the company's employees, the social psychological climate in the team, the peculiarities of the staff-management relationship, and also the ability to predict the stability and loyalty of the staff.

Objective of the research: We conduct a comparative research of the employee satisfaction in various types of organizations. Methods of research: The Job Satisfaction Survey (JSS, Spector P.E.), Motivators and Hygiene Factors Test (F. Herzberg), Screening Test for Social Psychological Climate (Mikhalyuk O.S., Shalyto A.U.), Taylor Manifest Anxiety Scale.

The sample of our research was divided into 3 groups:

- Group 1 - a group of office workers having a regular job;
- Group 2 - network marketing staff;
- Group 3 - a group of self-employment person.

The total sample is 180 persons (each sample of 60 persons) aged 24 to 39.

The results of our empirical study led us to the conclusion that there is a correlation between the satisfaction of work activity, the social psychological climate, the level of anxiety of employees and the factors motivating to work. Employees have a low level of anxiety if they have a favorable social psychological climate in the team. If the employee is more focused on motivating factors in his activity, then the level of the job satisfaction will be high. The staff will have a high level of anxiety and an orientation towards hygiene factors and low satisfaction with the work process if there is an unfavorable social psychological climate in the team.

There is a big difference in the job satisfaction level in difference groups of workers. A self-employment person has a highest level of the job satisfaction and an office workers have a lowest level of the job satisfaction.

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## Facilitating a Positive Experience for Military Personnel Transitioning to Civilian Life

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**Keywords:** transition, early intervention, employment, psychosocial adjustment

*Background:* In Australia, the all voluntary military service is a highly regarded occupation, which is recognized as placing high demands on the service member and their family [1] [2]. Every year approximately 5000 (9%) serving men and women discharge from the Australian Defence Force (ADF). The period of transition to civilian life offers an opportunity to intervene early to mitigate potentially significant psychosocial adjustment issues such as unemployment, family/relationship conflict, and mental ill health.

*Aim:* In 2015, through a partnership between the Department of Veterans' Affairs and the Department of Defence, the Transition and Wellbeing Research Program (Program) was commissioned. This constitutes the most comprehensive military study undertaken in Australia that examined the impact of military service on the mental, physical and social health of serving and ex-serving Australian Defence Force (ADF) members, and their families.

The Program, once complete, will comprise eight reports, which will be released over the next 12 months. It is only the second study of its type in the world that provides an in-depth understanding of life for transitioned military personnel. Canada conducted the other [3] Further, two Australian government inquiries in 2016 into the suicide and self-harm of serving, and ex-serving ADF members, have also provided recommendations for mitigation and early intervention with this cohort.

The aim of the Program and government inquiries was to provide recommendations for the development of innovative programs that will promote a positive transition experience, and ensure the mental and social health of serving and ex-serving ADF members and their families.

*Method:* Through surveys and interviews, the researchers engaged with a range of current and ex-serving ADF members using a two-phase design. It included 18% (N=4326) of the 24,932 personnel who had transitioned from the ADF between 2010 and 2014 and 42.3% (N=8480) of the 2015 current ADF population. The government initiated inquiries sought submissions from the public, including Defence personnel, on which they based their recommendations to government.

*Results:* The Program, and findings from government inquiries, identified a number of areas for early intervention to mitigate the risk of mental health and wellbeing issues, and to strengthen protective factors. A range of programs targeting suicide prevention, transition and family support have been developed and implemented. These include the Prime Minister's Veterans' Employment Program which works with industry to recognise the unique skills and experience of military service, the expansion of free health care to ex-serving ADF, with at least one day of service, for any mental health condition, the expansion of family

support that includes greater access to childcare, home care and counselling, and programs to develop and maintain social and community connectedness.

*Conclusions:* The Australian Government has been pro-active in improving the provision of, and access to, mental health care, transition support and employment assistance programs for current and ex-serving ADF members and their families. Australian Defence Force and the Department of Veterans' Affairs will continue to develop innovative social and mental health initiatives, to support a positive transition experience, particularly targeting those most at risk.

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The Centre for Traumatic Stress Studies at the University of Adelaide and the Australian Institute of Family Studies led the Transition and Wellbeing Research Program.

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## Lessons Learned from Delivering a Wellbeing Programme to University Students in a Residential College Setting

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**Keywords:** university student wellbeing, residential college, wellbeing programme, wellbeing programme delivery mechanism

The mental health and wellbeing of first-year university students is the subject of increasing concern with a range of programmes being trialled to counter depression and anxiety and support wellbeing [1]. Intervention content and mode of delivery include offering wellbeing courses for credit, voluntary non-credit programmes, changes to pedagogy and the learning environment, and providing wellbeing information in the college residences where students live [2].

This study examines lessons learned from delivering a wellbeing programme to first-year university students in one New Zealand residential college as part of a pilot intervention study to evaluate the impact of the wellbeing programme on students' mental health, wellbeing, and academic achievement. The intervention college Residential Assistants (senior students) who supervise and support first year students, received a two-day wellbeing training that included practical strategies for use with students through the academic year. Students attended up to 4 hours of voluntary wellbeing information sessions. Intervention components were designed to support well-being and belonging, build resilience in the face of setbacks, and develop prosocial behaviours and community connections. Data on the acceptability and usefulness of the wellbeing program were collected via an online self-assessment on mental wellbeing from the intervention college participants (n = 96) in mid-2017. The wellbeing programme was delivered in parallel to standard pastoral care that was available in both residential colleges.

Summaries of intervention participants' feedback on models of wellbeing that they found helpful, and a process evaluation of the wellbeing programme components will be presented. New components for the wellbeing programme, which were ascertained via focus groups with a sample of the intervention college participants will be described. Lessons learned from this pilot study will be summarised on the wellbeing training program and its delivery to the residential college students. The results raise questions about the optimal programme components, their delivery, and impact on wellbeing for first-year university students living at residential colleges.

### Acknowledgments

Study participants and staff at participating Residential Colleges, University of Otago Vice Chancellor's Strategic Research Fund.

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## Relational Communication and Marital Satisfaction in Young Married Couples

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**Keywords:** relational communication, marital satisfaction, spousal differences

*Background:* Marriage has its prominent role in a civilization. However, this relationship maintenance depends upon satisfaction from both ends [1]. The essential element requires for experiencing marital satisfaction is communication between the spouses [2].

*Aim:* The objective of our study was to find out whether relational communication (affection, similarity, trust, composure, formality, dominance, equality and task orientation) along with demographic variables (age, gender, education, age at marriage, age difference, family system, total number of family members, employment status, occupation, individual monthly income, overall monthly income, type of marriage, number of children and duration of marriage) were factors of marital satisfaction in young married couples

*Method:* Correlational research design was used and 50 couples were recruited by using convenience sampling. Relational Communication Scale (RCS)[3] and The Couples Satisfaction Index (CSI) [4] and a self-constructed Demographic Information sheet to test the suggested hypotheses.

*Results:* Regression analysis revealed that 22% variance was explained by the demographic variables and 61% variance was explained by dimensions of relational communication. Age at marriage, overall monthly income were the positive factors of marital satisfaction while joint family system turned out to be a negative predictor of marital satisfaction. Trust and equality were significant positive factors of marital satisfaction. Demographic variables (age at marriage, family system and overall monthly income) turned out to be significant factors of marital satisfaction in young married couples. There were no spousal differences between relational communication except for the dimension of similarity, and marital satisfaction in young married couples

*Conclusions:* The study highlights the importance of relational communication styles for a satisfied marital relationship. The study holds strong implications for clinical and counseling psychologists dealing marital issues. Couples who seek marital and family counseling can be taught ways to improve their relational communication in order to enhance their satisfaction from marital life. Relational communication needs to be broadly addressed in qualitative research and clinical work with couples.

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## Teaching Happiness – Development and Evaluation of a Training in Subjective Well-being for Teachers

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**Keywords:** subjective well-being, training, teacher, emotions, positive interventions

*Background:* One main aim of Positive Psychology is to increase subjective well-being (SWB) in non-pathological populations to empower individuals to thrive. Positive Outcomes of SWB include positive health behavior longevity, increased problem solving skills, creativity and productivity [1]. According to the broaden-and-build theory [2], especially the fostering of positive emotions promotes personal growth processes.

*Aim:* One main problem of the German school system is the poor state of teacher's health quality [3] and the question of how to support them in their fundamental task of giving the next generations a positive education. Positive Psychology offers different approaches to integrate more well-being into schools. The aim for this study was to develop a training for teachers that is easy to implement in teacher educational programs or as an in-school training while yielding a sustainable increase in subjective well-being.

*Method:* The training started with an e-mail-instructed exercise book for monitoring emotional balance (based on the mDES by Fredrickson [2]) every day for one week. On the following training day topics like well-being, positive emotions, self-efficacy and attributional styles as well as coping with stress, lack of time and negative emotions were taught. Participants had to perform positive interventions like *Three Good Things* [4] and meet again for two two-hour booster sessions every two weeks. The training was evaluated through a waiting-control group design with three measure points (pre, post and 1-month-follow-up). The online-questionnaires assessed the frequency of positive and negative emotions [5], satisfaction with life, thriving, self-efficacy, attributional style and emotional exhaustion.

*Results:* Analyses of planned contrasts showed a significantly higher increase for the training group ( $N=44$ ) than for the control group ( $N=54$ ) in frequency of positive emotions, thriving and attributional style (interaction effects  $d=0.48$ ,  $d=0.49$  and  $d=0.44$ ) and decrease in frequency of negative emotions and experiencing emotional exhaustion (interaction effects  $d=0.82$  and  $d=0.53$ ) from pre to 1-month-follow-up. Satisfaction with life and general self-efficacy were not affected significantly although tendencies pointed in the expected direction.

*Conclusions:* A clear advantage of the training lies in its manageable time expenditure that might facilitate (active) participation: The total face-to-face contact time of the training was only ten hours divided into one training day and two booster sessions and the self-structured exercises took only about two hours in total. A further advantage of the training might also be the integration of time management techniques and coping strategies for aversive emotions. The main limitations of this study derived from the field research approach that required some compromises in data collection and sample recruiting.

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## Brief Manager-Employee Dialogs: A Self-Determination Theory Perspective

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**Keywords:** extrinsic motivation, management communication, work performance, psychological needs support

*Background:* Under the rubric of New Public Management, public sector managers in many countries have adopted the extrinsic-motivational factors prevalent in the business world: Key Performance Indicators, documentation requirements, bonuses, etc. Increasing pressures to perform are causing stress and burnout in employees. Managers often cannot find the time to attend to their employees' well-being and quality of work life.

*Aim:* Research in Self-Determination Theory (SDT) [1] indicates that for people to thrive, their psychological needs for autonomy, competence and relatedness must be satisfied. Studies in work motivation [2] show that autonomous regulation, in which employees have accepted and integrated work norms, presupposes a type of management communication that is supportive of their psychological needs. The aim of the present work is to delineate methods that will accomplish this, while respecting the time constraints of modern work.

*Method:* We devise a form of dialog called "brief manager-employee dialog" (akin to "brief therapy": a client does not need 500 hours on the couch). Replacing hours-long department meetings and supplementing the too-infrequent annual performance review, the brief dialog is two or five minutes spent in directed conversation with an employee in a hallway or on a doorstep. The manager asks short questions, offers summary feedback and advice, and helps the employee focus and make progress, as inspired by the elements of need support identified in SDT (taking the other's perspective, acknowledging feelings, provide choice and rationale, provide structure, give feedback on course and progress, ensure involvement, identify unique contribution, etc.) [3]. The present presentation will provide many examples of the short and precise questions, suggestions and invitations that managers can provide on the spot.

*Results:* Brief manager-employee dialogs serve to empower employees by providing them with the needs-supportive supervision and feedback that is often lacking in a busy workday. Today's (young) employees want to be seen and acknowledged more frequently, so they know they are on track and on board.

*Conclusions:* The brief manager-employee dialog is a useful format for theory-guided management communication that addresses employees' psychological needs for autonomy, competence and relatedness, enabling them to perform and thrive at the same time.

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## "I have received so many gifts" – The Influence of a Positive Psychology Course on Students' Well-being and Phenomenology

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**Keywords:** positive psychology course, well-being, undergraduates

*Background:* I have been teaching positive psychology course over the last 7 years. As I have received interesting anecdotal feedback from my students over the first 5 years regarding their positive personal experiences during the course, I became interested in studying the effect of the course more systematically. I therefore began to check anonymously pre and post course' levels of happiness using The Oxford Happiness Questionnaire [1], And qualitatively analyzed student's reports of each of the 12 assignments they had to complete weekly during the semester, and their closing written narratives regarding their experience during the whole course (semester). The grades in this course were unrelated to student's reports (of any kind) as grades were given following a test that was scanned and analyzed automatically by a computer.

*Aim:* The aim of this study was to assess the influence of a positive psychology course on students' well- being and to gain further and more holistic qualitative understanding of significant and transformative processes during the course.

*Method:* 181 students (mean age =22) completed the Oxford Happiness Questionnaire [1] one week before the course began and within one week following the last class of the semester. A paired-samples t-test was conducted to compare pre and post course' levels of happiness.

*Results:* Results show significant improvement in happiness levels for pre course (M=4.05, SD=.66) and post course (M=4.2, SD=.71) conditions;  $t(7.44)=$ ,  $p < .000$

*Conclusions:* These results suggest that a participation in a course in positive psychology may contribute to one's happiness levels. This is in accordance with Maybury [2] and Goodman et al. [3] studies. Although these three studies have congruent findings, further research is needed to clarify whether this effect is a result of a specific teacher, teaching methods, home assignments, or the general effect of beginning versus ending a semester, or a combination of two or more of the above (or more ) possible explanations.

On my short oral presentation I would like to describe the framework of the course and its assignments, and to further discuss students experience and insights regarding their weekly assignments and their overall experience of the course. While Maybury's [2] and Goodmans' studies are based solely on rich quantitative data and relates to few different measures (e.g. mindfulness, meaning in life, happiness, stress, etc.) my study focused solely on a measure of happiness levels but further assessed qualitatively, student's full phenomenology and experiences during the course, through the analysis of their deep personal reflections.

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## An Exploration of the Factors that Contribute Towards Positive Adjustment in Individuals Affected by Cleft Lip and/or Palate

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**Keywords:** positive adjustment, clinical populations and psychotherapy, contributing factors, applied research, narrative life stories

*Background:* Cleft lip and/or palate (CL/P) is the most common congenital craniofacial condition, occurring in approximately one in every 700 live births (WHO, 2001). Individuals with CL/P can face a multitude of challenges, including problems with speech, hearing, feeding and breathing. In addition, in the instance the cleft causes a visible difference in appearance, this for some can be the cause of psychological distress. Despite such challenges (and whilst acknowledging some face difficulties), there are others that adjust positively and go on to live normal, happy and fulfilling lives. However, currently, the factors that contribute towards such positive adjustment in individuals affected by CL/P are not known, and this will continue to be the case whilst the deficit model prevails. The same can be said for many clinical populations, whilst research concerning such positive factors in non-clinical populations continues to grow.

*Aim:* The overall aim of the study was to establish a framework of factors that contribute towards long-term positive adjustment in a clinical population of individuals with CL/P.

*Method:* A two-pronged qualitative approach was employed for this study. Part one comprised of narrative life story interviews with adults (21-63 years old). This involved asking participants to split their life into chapters, and to discuss key life scenes including high and low points (McAdams, 2008). The aim was to find out how positive adjustment is characterised in adults with CL/P. Part two of the study entailed a focus group with Cleft Specialist Clinical Psychologists, in which the characteristics identified in the interviews were presented for discussion, with the aim of developing a framework of contributing factors. Data were analysed using Inductive Thematic Analysis on NVivo.

*Results:* Analyses identified seven main themes including “Everybody is different so nobody is different”, ‘Not wanting to be defined my difference’, ‘Support networks’, ‘Seeing it through parent’s eyes’, ‘No other choice but to adapt’, “Rediscovering who you really are”, and “My experiences have made me more understanding of others”. These themes combined with results from the focus group led to the identification of the following factors as those contributing towards positive adjustment in individuals affected by CL/P: optimism, social support, self-compassion, compassion, grit, passion, and psychological flexibility.

*Conclusions:* Findings suggest a number of potential contributing factors to resilience in adults with CL/P including optimism, grit, self-compassion, compassion (for others), social support, and psychological flexibility. Results are also suggestive of potential time-points for

positive psychology intervention and measurement. Progress on the next stage of this project will also be discussed, involving the measurement (quantitative) of these constructs in groups of adolescents with and without CL/P.

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## Self-regulated Learning Strategies and Flow in Exam and No-exam Period

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**Keywords:** flow, student, self-regulated learning, exams

*Background:* Experiencing flow in academic context, and especially in learning has multiple benefits, since it is associated with better achievement as well as with increased well-being [1]. There are several studies on the flow experiences in learning context, but studies on the relationship between the use of the self-regulated learning strategies (including cognitive learning strategies of memorizing, organization and elaboration) and flow experiences in different learning contexts with college students are scarce.

*Aim:* This study investigated the relationship between the types of self-regulated learning strategies and associated flow in exam and no-exam period.

*Method:* Experience sampling method was used (ESM), and students were monitored for one week during no-exam and one week during exam period. In this paper, only ESM samples collected while students were in some study-related task are analyzed. The sample included 101 Croatian university students (82% females), ranging in age from 19 to 28, with a mean age of 20.82 years. Total of 1866 ESM responses were analyzed that occurred in a learning context. Modified Ullén's SPFQ scale was used as the measure of flow experience [2]. Several items were designed to measure the use of cognitive learning strategies: rehearsal (repetition of a material with the goal of memorizing); organization of the material (e.g., outlining, taking notes, making tables and classifications) and elaboration (e.g., development of own ideas, association of the material with theory and application in the real life context).

*Results:* There were no gender differences in measured variables. Data were analyzed using series of two-way analyses of variance (cognitive learning strategy x time period). It was found that flow experience was generally more related to use of elaboration cognitive strategies suggesting the importance of flow for deep information processing in learning. However, flow was generally less frequent during exam period. This finding may be due to the fact that in exam period students rated their challenges to be higher and skills lower than in no-exam period.

*Conclusions:* Results have implications for instructional methods aiming at increasing students' use of elaboration strategies, which may thus increase flow in learning and consequently academic achievement and well-being.

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## Art and Exercise for The Well-being of Older People: A Randomized Controlled Trial

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**Keywords:** art activities, qigong exercise, older people, well-being, depression

*Background:* There is a large and increasing population of older people across the world. This poses major challenges especially in health-care services. The present health-care services in some countries are underdeveloped and do not specifically address older people's needs, particularly in nursing homes [1, 2]. In Indonesia, for example, some nursing homes have uninteresting programs and lack of meaningful activities. This condition will make older people feel depressed and inevitably reduce their well-being. Such an unfortunate condition is at least in part due to the lack of information about suitable programs for older people in nursing homes [3]. Luckily, research suggests that art activities or Qigong exercise are low-intensity interventions that have been proved suitable for older people [4-8]. Most of art therapy studies were conducted in Western countries [9] and studies on Qigong were mostly held in Eastern countries [10]. Therefore, combining art therapy and Qigong exercise might be more beneficial for older people from all countries.

*Aim:* The aim of our study is to investigate the effect of integrated intervention of art activities and Qigong exercise in comparison to single interventions (art activities or Qigong exercise) on the well-being and depressive symptoms of older people in nursing homes.

*Method:* This randomized controlled trial (RCT) was administered in eight weeks at nine nursing homes in Jakarta area, Indonesia. Four groups were compared and eligible participants (>50 years) were randomly assigned to one of the groups: (1) a group with Qigong and art activities as an integrated intervention, (2) a group with art activities, (3) a group with Qigong as a single intervention, and (4) a control group that gets no intervention. The intervention was conducted by a researcher and junior psychologists who have experience in art therapy and were trained as Qigong instructors. Measurements were administered at baseline (t0) and post-intervention (t1) for all participants. Outcomes on well-being were measured with the World Health Organization Quality Of Life (WHOQOL-Bref) and The Satisfaction With Life Scale (SWLS); and depression was measured with the Beck Depression Inventory-II (BDI-II), and Geriatric Depression Scale 15-item (GDS 15-item).

*Results:* Out of 299 nursing home residents screened, 267 were eligible to participate and consented with the intervention (mean age 74 years). There was a statistically significant difference in well-being and depression over time ( $p < .002$ ). The results showed a significant

*increase* in the well-being domain ‘social relationships’ ( $p = .032$ ,  $\eta_p^2 = .033$ ,  $M_{t_0} = 50,08$ ,  $M_{t_1} = 52,53$ ) based on WHOQOL-Bref, and significant *decrease* in depression based on the BDI-II ( $p = .016$ ,  $\eta_p^2 = .039$ ,  $M_{t_0} = 10,65$ ,  $M_{t_1} = 8,44$ ). Looking in more detail, the intervention groups in overall improved significantly more than the control group ( $p = .024$ ). However, no significant differences were found between the integrated intervention group compared to single intervention groups ( $p > .05$ ). Additional analyses were performed to compare the art group and the Qigong group. The art group performed better on domain ‘social relationships’ ( $p = .007$ ,  $M_{t_0} = 48,30$ ,  $M_{t_1} = 55,98$ ) and domain ‘environment health’ ( $p = .021$ ,  $M_{t_0} = 55,26$ ,  $M_{t_1} = 60,81$ ) on the WHOQOL-Bref than participants in the Qigong group.

*Conclusions:* The intervention of Qigong exercise and or art activities in particular helps to increase well-being and reduce depressive symptoms in this target group. Thus, the intervention can be widely implemented in mental health care services, not only in a nursing home in Indonesia, but also in nursing homes or public facilities in other countries that provide programs for improving the well-being of older people.

### Acknowledgments

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## Engaging with Life: Synchronicity Awareness as a Pathway to Personal Growth

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**Keywords:** synchronicity awareness, meaning, positive growth

*Background:* One of the psychological mechanisms involved in recognizing coherence in one's life is synchronicity, which is a psychologically meaningful connection between an inner event (e.g. thought or dream) and one or more external events occurring simultaneously [1]. Synchronicity awareness refers to *being aware* of such meaningful coincidences. Case studies have been used to demonstrate that awareness to synchronicity might be beneficial in clinical and therapeutic settings. However, the empirical and systematic investigation of awareness of synchronicity is rare.

*Aim:* The current study addressed the following questions: a) what characterizes an awareness of meaningful coincidences and b) what are the possible benefits associated with such awareness.

*Method:* This study adopted a phenomenological perspective. Face-to-face, in-depth, and semi-structured interviews were conducted with 45 adults, 19 men, 26 women, aged 25-63.

*Results:* The interviews' analysis yielded a dynamic three stage process of synchronicity awareness (see figure 1). The first stage (R) is characterized by an increased *responsiveness* to feelings and cognitions and to the external environment. Such responsiveness was reported to have involved such qualities as attentiveness, exploration, curiosity and an attunement to novel experiences which allowed the individual to be open to new opportunities. The second stage (E), *emotion evoking event* occurs when a sudden unexpected event according with an inner feeling or thought happens. The third stage (M) represents the process of *subjective meaning making* that follows the reported coincidences. By connecting the coincidental events to their personal narratives, participants felt that their lives were guided and directed in a way that unfolded as a journey with yet unforeseen paths.

*Conclusions:* Based on the theoretical background and the emerging findings, we propose a three-stage process of synchronicity awareness (REM): Responsiveness (R), Emotion-evoking event (E), and meaning making (M). Our preliminary data further suggest that individuals who stay receptive, who turn accidental cues into meaningful cues, and who actively act to enhance such experiences may cope better with today's changing environment.

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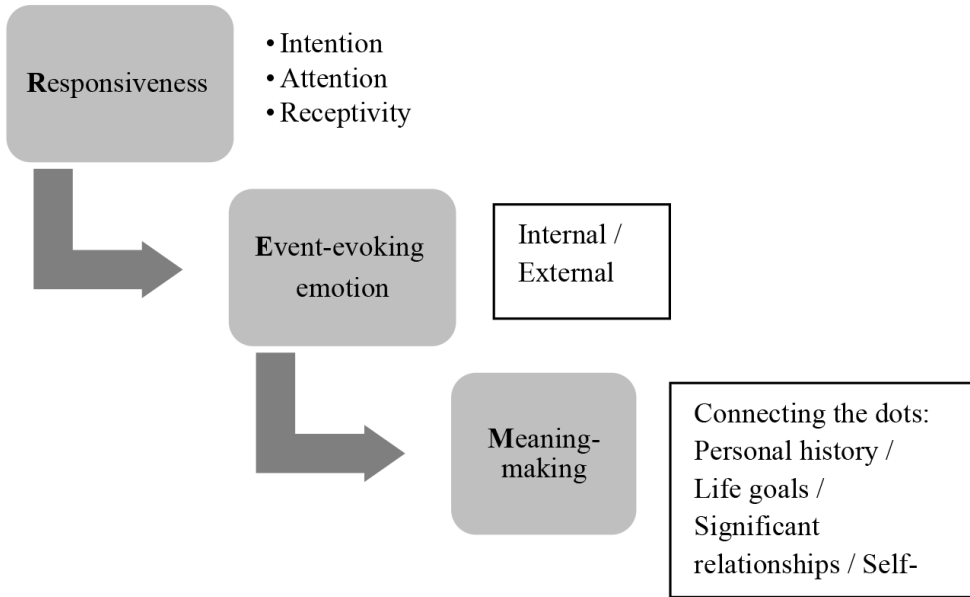


Figure 1. REM suggested model

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## Why Meditation does not Work? Obstacles and Dangers for Meditation from the Tibetan Buddhism Teachers' Perspective - Qualitative Study

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**Keywords:** meditation, qualitative analysis, cross-cultural study, worldview, Tibetan Buddhism

*Background:* In popular understanding, meditation and mindfulness seems to be the panacea for all psychological difficulties. Although numerous psychological studies on meditation have been conducted, the results are often inconclusive [1]. As the word “meditation” has become more popular, it has been used to describe various practices, resulting in terminology confusion. Despite its religious origin, meditation in psychological research is most often conceptualised as a tool for working with psychological problems [2].

*Aim:* The objective of this research is identification, and characterisation of obstacles and dangers for mediation in the context of preliminary practices - ngondro (tib. *sngon 'gro*) in the tradition of Tibetan Buddhism of Karma Kagyu lineage. Integral aim of the study is also a comparative analysis of theoretical meditation descriptions, and descriptions of personal meditation experiences among respondents from various cultures. In this approach, meditation is understood as a means towards transformation of consciousness (i.e. enlightenment).

*Method:* Semi-structured interviews were conducted with 63 meditation teachers in Karma Kagyu lineage of Tibetan Buddhism (21 to 75 y.o.). Snowball sampling was used, ensuring that it reflects diversity of approaches and styles of practices in this lineage at the same time. Experts from Eastern culture (Tibet, India, Nepal) were mostly monks, while those from Europe (Poland, France, Great Britain, Germany, Austria, Hungary, Denmark, Spain, Czech Rep. Slovakia, Ukraine, Russia) differ in their occupations.

The interview consist of three parts concerning: theoretical explanation of meditation, personal experience in meditation, and demographic data. Interviews were conducted in english, a main medium for meditation explanation, upon which, content analysis was employed.

*Results:* General categories of: mechanism, process, context, beginning state, results and obstacles were created. Subcategorises of obstacles to the meditation, and to the practice were distinguished by time criteria. Content analysis shows the differences in description of obstacles between Eastern and Western teachers, both on the theoretical and experiential levels.

*Conclusions:* The obstacles and dangers relate primarily to respondents' worldview, rather than to the meditating activity. Meditation appears not to be important in itself - worldview determines if the process leads to aspired results, and meditation is a tool.

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## Tolerance Dance: Motor-Expressive Activities for Students' Well-being at School and for the Development of a Tolerant Social Model

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**Keywords:** well-being, tolerance, motor-expressive activities, positive psychology, warm cognition

*Background:* The Physical Education experience "Tolerance Dance", an expression-centred motor group activity, was proposed to 72 high school students in the academic year 2016/17. It is directly related to the concept of tolerance as "elevation" of what is different from the self, by using psycho-physic actions typical of motor-expressive activities, especially lifting. This thought is supported by the etymological meaning of the word "tolerate", from Latin "*tolerare*", whose root "*tol*" means "*to lift*" [1].

*Aims:* This experience resolved to contribute to students' formation by generating a condition of well-being under a eudemonic perspective, through: pleasantness, empathy, and collaboration [2]. Besides, the Dance wants to interpose itself to the androcentric logic which rules teenagers' education to movement in school, believing that this is the only way to teach to understand and respect the values of both genders identities.

*Method:* Unit of learning: 12 lessons, each 1 hour long. Methodology: Cooperative learning [3]. The content of the lessons is based on: presentation of the activity and sharing with the students: goal, time and invitation "to face to face promotional interaction"; sequence of group aerobic gymnastics with possible contamination of other styles; mimic-expressive actions with music or use of voice [4]; body touching in proxemics progression; lifting; human pyramids; creation of the choreography conceived by the students, based on music with a rhythm "*adagio*" freely chosen [5]. Verification: execution of the Dance; filming by the teacher; watching of the video; auto evaluation disciplinary and transversal competences; group revision; metacognitive personal reflection. The students were asked to write, in one word and anonymously, the prevalent perception during the activity. The teacher observed the students' attitude according to "Rosenberg and Hovland tripartite model" [6]. The attitudes were noted in a Logbook.

*Results:* The positive perceptions, registered by the students, were 73,6%, the most numerous: fun, union, collaboration, which lead back to the hypothesis of pleasantness, empathy, collaboration. The negative perceptions were 26,4%, for example: difficulty of collaboration, indifference, shame. Prevalent positive attitudes emerged from the teacher's observations, in particular: serenity, adaptation, and sense of individual responsibility. Some negative attitudes were of kind cognitive (gender prejudices and stereotypes), affective (difficulty of self-expression and emotions), behavioural (difficulties in collaborating).

*Conclusions:* The numerous positive things that emerged, together with climate created in the classroom and the “smile” of the students, seem to generate a condition of Well-being, according to the acceptance of “happy co-existence”, founded on tolerance. TD also seems to be responding to the “warm cognition” *Method:* “it is needed to teach with the smile, therefore with this emotion of wellbeing!” [7].

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**LIFTING**



Figure 1. Lifting in the dance

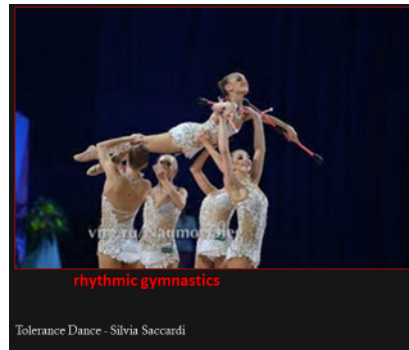


Figure 2. Lifting in the sports

**TOLERANCE DANCE EXPERIENCE**

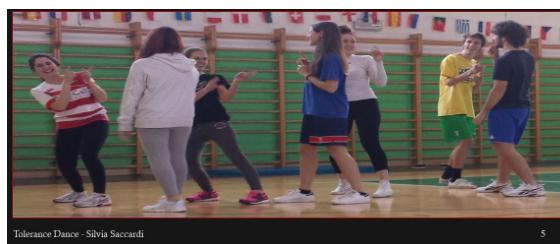


Figure 3. Mimic - expressive actions and use of voce

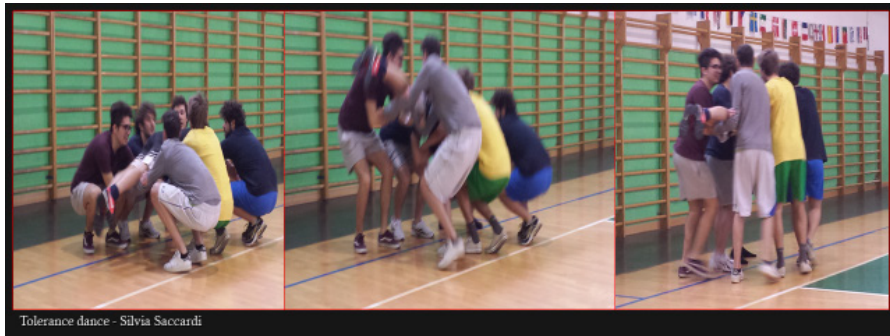


Figure 4. Lifting



Figure 5. Human pyramids



Figure 6. Auto evaluation



## Factor Structure of the Value in Action Inventory of Strengths (VIA-IS) Reduced Set for 4 Arab Countries

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**Keywords:** character of strengths, VIA-SI reduced set, factor structure, Arab Asian African countries

*Background:* The Values in Action Inventory of Strengths VIA-IS (Peterson & Seligman, 2006; Ruch et al., 2010) is a self-report questionnaire that measures 24 widely valued strengths of character. A very large sample completed the VIA-IS with all 240 character strengths items and a reduced set of 107 unidimensional character strength items. We used this reduced version that was developed by Ng, Cao, Marsh, Tay, and Seligman (2017) in the current research.

*Aim:* In Arab countries, the VIA-IS reduced set has not been validated yet. For that, the specific objectives of the present study are threefold: i) to test the internal reliability and the structure validity of the Arabic version in some Arab countries, ii) to test the effect of sex on the factors and subscales of the VIA-IS reduced set, and iii) to explore the country which has the highest scores on the subscales of the different virtues.

*Method:* The Arabic translation, using “forward and backward” translation by four bilingual professionals, was conducted and Arabic versions equivalent to the original scale were created. Translators were not affiliated with the study to ensure comparability and meaning equivalence (Vallerand & Hess, 2000). The standard Arabic language was used in the translation. An independent professional revised the created versions to create an experimental Arabic version equivalent to the original scale. In general, several minor differences were corrected at this stage by agreement between the different translations. The final version was revised to ensure that the language used would be understandable by the participants from the four countries.

*Participants and procedures.* In the present study, participants were 4705 ( $M=21.18$ ;  $SD=2.37$ ) from 4 countries (Egypt, 1965; Palestine, 1163; Lebanon, 793 and Algeria, 784). They were 32.97% men and 67.03% women. Participants were asked to rate each item based on a 5-point Likert scale, with response options ranging from 1 (‘Very Much Unlike Me’) to 5 (‘Very Much Like Me’).

*Measure.* The Values in Action Inventory of Strengths (VIA-IS) scale reduced by Ng. and his colleagues (2017) was used to provide an integrative measure of character strengths. The VIA-IS consists of 107 items for measuring 6 virtues and 24 character strengths. The 6 virtues are wisdom and knowledge, courage, humanity, justice, temperance and transcendence.

*Results:* Using the Mplus 7.3 software, results confirmed the 6 factors model. CFA showed satisfactory fit to the data in terms of  $\chi^2$ , df ratio, GFI, NNFI and RMSEA. The  $\chi^2$  (2.983, N= 4705),  $p = 0.00$ , Non Normed Fit Index (NNFI)= 0.97, Comparative Fit Index (CFI) = 0.98, Root-Mean-Square Error of Approximation (RMSEA)= .05 [.03; .07], Goodness-of-Fit Index (GFI) = 0.97, Adjusted Goodness-of-Fit Index (GFI) = 0.96. The Goodness of Fit was acceptable in terms of  $\chi^2/df$  ratio, GFI, NNFI, RMR, and RMSEA. The results indicated that the 24 subscales had satisfactory reliability (mean  $\alpha = .83$ , mean corrected item-total correlations = .40). Results of the present study are similar with the results of (Hannush, 2005; Peterson & Seligman, 2006). In addition, sex has an effect on both of only 5 factors and 19 subscales at  $p < .05$  or at  $p < .01$ . Finally, Egypt and Algeria are the countries tend to have the highest values on 5 factors score.

*Conclusions:* We concluded that the Arabic version of VIA-IS reduced set had an acceptable reliability and factor structure as well as the original version (Peterson & Seligman, 2006). Sex has an effect on both factors and subscales. Finally, Egypt and Algeria are the countries tend to have the highest values on 5 factors score.

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## **When Times Get Tough: How Savoring Might be Good for Your and Your Partner's Relationship Satisfaction, Especially if You're a Woman**

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**Keywords:** savoring, couples, shared stressor, actor-partner interdependence model

*Background:* The notion of savoring positive experiences is somewhat poetic, perhaps even romantic, and although research supports the link between savoring and relationship outcomes [1], there is more to the story. Because savoring is a way to cultivate positive emotions and build resilience to stressful events [2], we propose that in the face of a stressful life event savoring is important for not only one's own relationship satisfaction (actor effect) but also for one's partner's relationship satisfaction (partner effect).

*Aim:* This study aims to understand savoring as an interpersonal resource for couples coping with a shared stressor by applying the actor-partner interdependence model to test actor and partner effects of savoring on relationship satisfaction.

*Method:* One hundred and twenty-eight heterosexual couples who experienced a stressful life event in the past year participated in this standard dyadic study where each couple member individually completed measures of the impact of the event, savoring beliefs (savoring through reminiscence, savoring in the moment, and savoring through anticipation), and relationship satisfaction.

*Results:* Couple members' scores on key study variables were related and women scored higher than men on savoring through reminiscence and overall savoring. The actor effect of savouring in the moment on relationship satisfaction was positive and significant for women but not for men, and the partner effect of savouring in the moment was significant and positive going from the woman to the man and non-significant going from the man to the woman. Thus, a woman's savouring in the moment predicts better relationship satisfaction for her and for her partner. There was a significant interaction between actor impact of the event and partner savoring in the moment in predicting relationship satisfaction. The slope for low partner savouring in the moment was negative and significant and the slope for high partner savouring in the moment was negative but not significant. This indicates that the negative relationship between one's impact of event and relationship satisfaction is buffered by one's partner's savouring in the moment.

*Conclusions:* This study offers insight into the possible role savoring plays at the interpersonal level when couples experience a stressful life event. Future longitudinal research is needed to support the direction of relationships theorized in this study; nevertheless, the implications of this study include that savoring operates at both the intra- and interpersonal level within couples and should be further studied as a couple-level resource in the face of stress.

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## Positive Psychology for Female Leadership in Europe

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**Keywords:** positive leadership, positive female leadership, positive communication, European policies, gender diversity

*Background:* In spite of national and EU-level strategies on gender equality, European research and economy still suffer from a considerable loss and inefficient use of highly skilled women. The annual increase in female researchers is less than half the annual number of female PhD graduates and too few women are in leadership positions or involved in decision-making [1]. The same applies to members of parliaments, boards of directors and CEOs of large European companies. In 2015, only 3.5 percent of European CEOs were women [2]. Empowerment trainings and European gender policies usually do not include or focus on Positive Psychology. There are only a few but promising examples of how these trainings and policies can benefit from the methods and tools of Positive Psychology.

*Aim:* Our presentation aims at presenting these examples by analyzing and describing the role and impact of Positive Psychology on Empowerment trainings for female leaders in large European Companies. In particular, our research questions are: What is the role of positive communication in positive female leadership? How European policies on gender diversity and gender equality can benefit from Positive Psychology? How to leverage positive female leadership in Europe?

*Method:* Curricula of empowerment trainings with components of Positive Psychology will be analyzed and compared with research about female leadership and diversity management in the EU. Gender policies and female empowerment in the EU will be considered and feedback from participants of empowerment trainings will be evaluated, to assess the acceptance and appreciation of Positive Psychology among senior female leaders in Central Europe.

*Results:* Applied Positive Psychology can add value to empowerment trainings for female leaders.

*Conclusions:* Good practice of applied Positive Psychology in Empowerment and Leadership trainings for female leaders in Europe should be shared and disseminated.

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## Locus of Control and Gratitude Mediate the Association between Optimism and Subjective Well-being

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**Keywords:** locus of control, gratitude, optimism, subjective well-being

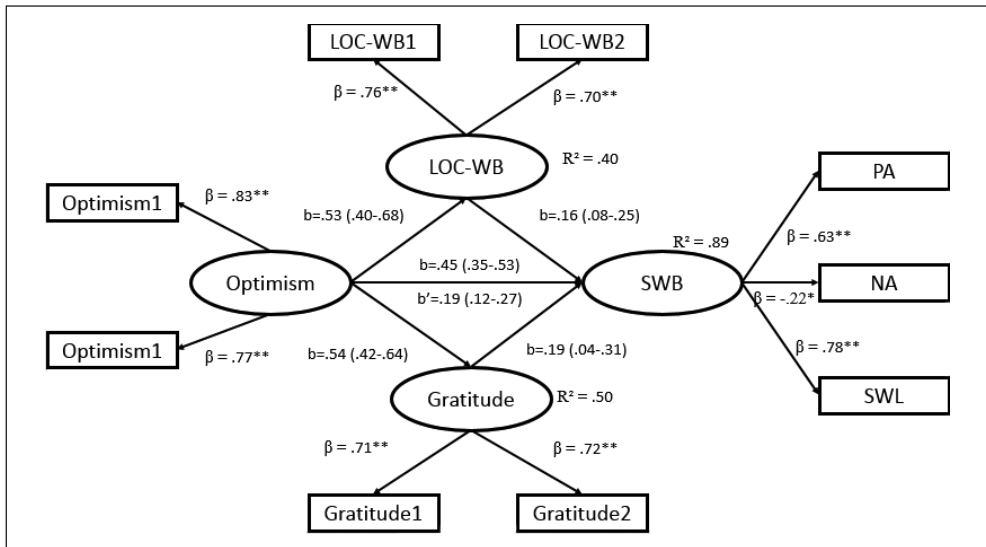
*Background:* Personality traits are considered to be stable antecedents for Subjective Well-Being (SWB) [1]. One of dispositional traits that are positively linked to SWB is optimism, that is widespread expectations that good things will happen instead of bad things [2]. Empirical studies have examined the relationships between optimism and well-being, yet little attention has been paid to the systematic study of the underlying *personality* mechanisms that promote well-being.

*Aim:* We suggest two mediation mechanisms that could be accounted for the positive contribution of optimism to well-being – locus of control and gratitude. Optimistic people have also higher internal locus of control since they expect good things to happen, and also believe that personal efforts account for the expected positive outcomes [3]. In addition, optimistic people also adapt positive views on themselves and others by being more grateful, in order to achieve higher well-being [4].

*Method:* Employees (N=616) from large health care services organization in Israel completed the study's survey which included abbreviated versions of the following scales (all between 1 – Strongly disagree, and 7 – Strongly agree): *Dispositional Optimism* [5],  $\alpha=.79$ , *Locus of control regarding well-being* (LC-WB) [6],  $\alpha=.72$ , *Gratitude* [7],  $\alpha=.68$ , *Satisfaction With Life* [8],  $\alpha=.79$ , *Positive and Negative Affectivity* [9],  $\alpha=.62$  for PA and  $\alpha=.60$  for NA. To examine the mediation model, a structural equation modeling was conducted using bootstrapping method.

*Results:* Optimism directly predicted SWB ( $b = 0.45$ ,  $SE = 0.04$ ,  $CI = 0.37-0.53$ ). Testing the mechanism of mediation between optimism and SWB via optimism, showed that optimism predicts LOC-WB ( $b = 0.53$ ,  $SE = 0.06$ ,  $CI = 0.40-0.68$ ), while in turn was associated with SWB ( $b = 0.16$ ,  $SE = 0.04$ ,  $CI = 0.08-0.25$ ). Similarly, testing second mechanism of mediation between optimism and SWB via gratitude, showed that optimism predicts gratitude ( $b = 0.54$ ,  $SE = 0.05$ ,  $CI = 0.42-0.64$ ), while in turn was associated with SWB ( $b = 0.19$ ,  $SE = 0.07$ ,  $CI = 0.04-0.31$ ).

*Conclusions:* Results emphasize the mediating role of two *personality* traits, between optimism and SWB. Hence, these mechanisms elaborate perspective on the way optimism enhances well-being, specifically by cognitive principles of higher sense of control on one's well-being and also by strengthening the perception of being thankful about positive aspects in life.



**Figure 1.** Associations between Optimism, Locus Of Control regarding Well-Being, Gratitude and SWB. Goodness of fit indices:  $\chi^2(22) = 23.23, p = .06; CFI = 0.99, NFI = 0.99, TLI = .99, RMSEA = 0.03$  (90% CI [.01-.05],  $SRMR = 0.04$ ).

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## Examining Happiness- Productivity Hypothesis using Five-Dimensional Model of Psychological Well-Being

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**Keywords:** productivity, hedonia, Eudaimonia purpose in life

*Background:* The Holy Grail of industrial psychology, linking happiness & productivity, has held substantial appeal with management research [1]. Some qualitative & quantitative studies advocated that H-P hypothesis is insignificant [2] & others have established the significance [3]. While reviewing, we found few anomalies in literature. Approx. 62% studies reviewed for this research used hedonic view of happiness & 79% studies used subjective measure of productivity. Hedonia & subjective measures are not inappropriate but comprehensive understanding of H-P hypothesis requires more research using Eudaimonia & objective measures of productivity.

*Aim:* The longitudinal study addressed the anomalies by examining H-P hypothesis using Eudaimonic view. 38% studies using Eudaimonia used 8-item index of psychological well-being (PWB) [4]. But Ryff's 6-factor model of PWB is more appropriate as it is close to Eudaimonia defined by Aristotle in the Nicomachean Ethics [5 & 6]. Drawing on the theory of Eudaimonia and existing research on H-P hypothesis, we hypothesized:

Eudaimonia would predict high productivity when controlling for previous productivity (Fig.1).

*Method:* Longitudinal design was used to collect survey-based data from students. We used CQPI for term 1 as previous productivity (P1) & term 3 as future productivity (P2). Self-report measure of PWB (84-items) was used after P1. P1 was used as control variable to address "success predicts success" bias\*. Sample Size- 178.

*Results:* Hierarchical regression analysis was performed in SPSS. P1 and PWB (only Purpose in life (PiL)) significantly predicted P2 ( $R^2=.28$ ;  $F(9, 168)=7.42$ ,  $p<.00$ ). PiL accounted for significant amount of variance above and beyond P1 to predict P2 ( $\Delta R^2=.06$ ;  $F(6, 168)=2.19$ ,  $p<.04$ ).

\*Bias was significant and was controlled in analysis.

*Conclusions:* Our study was partially successful to explain H-P hypothesis from Eudaimonic view. Partial because the H-P hypothesis was significant only in case of PiL but successful because PiL is considered to be the flagship indicator of Eudaimonia.



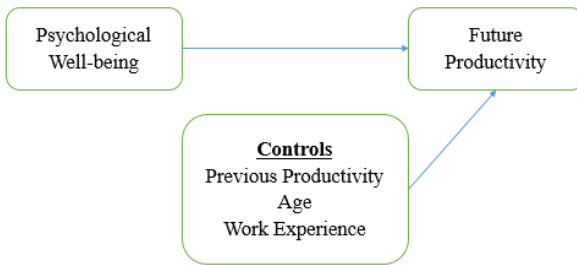


Figure 1.

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## A Model of Financial Efficacy and Problem-Solving Orientations Linking to Student Loan Repayment and Overall Well-being

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**Keywords:** overall well-being, financial efficacy, problem-solving, young adults

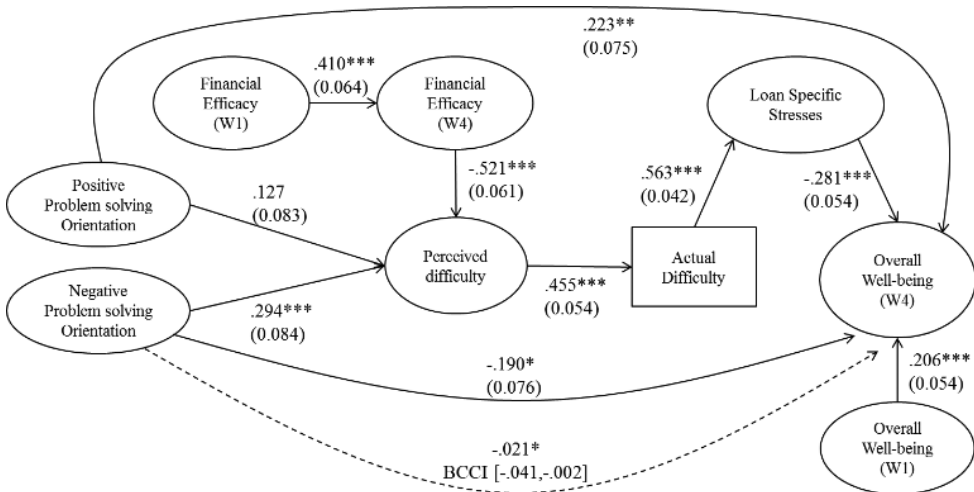
*Background:* Despite the sharp increase in the number of college students acquiring loans in recent years and the total amount of debt owed in United States, remarkably few have sought to identify the personal (non-monetary) factors that can either facilitate or impede the repayment process and its impact on loan-specific stress and overall well-being.

*Aim:* Based on the problem-solving model (D’Zurilla, Nezu, & Maydeau-Olivares, 2004) and the extant literature on debt and overall well-being, we proposed and tested a conceptual model linking financial efficacy and problem-solving orientations to student loan repayment and ultimately to overall-wellbeing.

*Method:* We relied on data collected by means of a four-wave longitudinal, online, self-report survey of a sample of young adults who were enrolled at a major southwestern university in the USA. The first wave of data were collected during their first year at college (ages 18-23), the second during their fourth year (ages 20-25) at college, the third two years after college (ages 22 to 27), and the fourth wave nine years after their freshmen year (ages 27-32). We assessed financial self-efficacy and overall well-being at each wave and measured loan-related stress and problem-solving orientations at Wave 4. Of the 855 who participated in Wave 4, those (N=396) who reported having carried a student loan debt were analyzed.

*Results:* A structural equation modeling analysis using the full-information, maximum-likelihood (FIML) method along with *Mplus* was used for data analysis. The model fit was deemed adequate based on a number of model fit indices:  $\chi^2(703) = 6,688.84$ ,  $p < 0.001$ , CFI = 0.83, RMSEA = 0.07 (90% C.I. = 0.06 to 0.07), and SRMR = 0.08 (see Fig 1). Those who registered a greater financial efficacy at Wave 4 perceived less difficulty in paying off their loans, while those who registered a more negative problem-solving orientation perceived more difficulty in paying off their loans. Perceived difficulty was directly related to the actual difficulty. The level of actual difficulty was, in turn, associated with overall well-being, which was mediated through loan-specific stress. Both positive and negative problem-solving orientations were directly associated with overall well-being; however, the negative problem-solving orientation was also indirectly associated with overall well-being.

*Conclusions:* Achieving overall well-being may depend to a great extent on the problem-solving orientation and financial efficacy that an individual develops during young adulthood. If so, then formal education designed to teach effective problem-solving styles and improve financial efficacy, if delivered early, could help to reverse the current trend toward greater debt burden among young adults.



**Figure 1.** Coefficient (standard error) of the full mediation model of financial efficacy and problem-solving orientations

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## **Do Editation & Learning Go Hand in Hand: What Do Children and Teenagers Gain from the Mindful Up Programs?**

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Concentrate, you're not motivated, stop fidgeting, calm yourself, pay attention, you lack self confidence, you have no reason to stress out! ... The stakes in learning, the pressure regarding success in school, have today become very important in children's and teenagers' environments. However, all the essential transversal skills and those that will make a difference: attention, concentration, motivation, calm, self confidence, feeling able, ... are never taught! An enormous paradox! The Mindful Up programs, based on the MBSR and MBCT programs, are the fruit of a long clinical expertise with children and teenagers and are built on the gains of neuropsychology in learning and of positive psychology. Understanding who we are and how we function, on a cognitive and affective level, knowing your resources and strengths, so that these Mindful Up programs become a life long resource for our children and teenagers ! The presentation will introduce the programs and their construction which included the gains of Mindfulness, psychoeducation and major ingredients of positive psychology. Which specific gains? For personality development? For emotional control? To accompany and enhance learning? To benefit attention and concentration in our hyperconnected culture? To revive solid and profound self confidence? Understanding who we are and how we function, on a cognitive and affective level, knowing your resources and your strengths, to give a lifetime of assets and skills to a whole new generation. What is learnt as a child lasts a lifetime!

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## Relationship Between Waking Mental Well-being and Dream Affect: From Anxiety to Peace of Mind

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**Keywords:** peace of mind, well-being, dreaming, emotions

*Background:* Although it is increasingly recognized that sleep is closely linked to waking mental well-being, the relationship between dreams and well-being is less established. Empirical research has mostly focused on ill-being by studying the dreams of people with symptoms of psychopathology [1]. Scientific research on well-being has evolved rapidly and currently several different types [2] and components [3] of well-being are distinguished. Surprisingly, only a few studies have explored the relationship between waking well-being and dream affect. Moreover, Eastern conceptualizations of well-being, such as peace of mind [4], are often overlooked in well-being research, and not addressed in dream research, although these may constitute an important aspect of well-being also in the Western cultures [5]. Here we integrate the two different fields of research — well-being and dream research — and explore the relationship between waking well-being and dream affect by measuring not only the symptoms of ill-being but well-being as conceptualized in the science of well-being. Moreover, this is the first study to investigate peace of mind in a Western sample as part of a comprehensive framework of well-being and in relation to dream content.

*Aim:* Our aim was to explore which aspects of waking ill-being (i.e., symptoms of depression and anxiety) and well-being (i.e., positive affect, negative affect, life satisfaction, domain satisfaction, eudaimonic well-being, peace of mind) are related to affective content in subsequent dreams.

*Method:* 44 healthy participants (16 men, 28 women,  $M_{\text{age}} = 26.93$ ,  $SD_{\text{age}} = 5.09$ ) completed a comprehensive well-being questionnaire, followed by a three-week daily diary of dream reports ( $N = 552$ ,  $M = 12.55$ ,  $SD = 5.72$ ) and ratings of dream affect using the modified Differential Emotions Scale [6]. In addition to self-ratings of dream affect, dream reports were content analysed by external judges using the same scale.

*Results:* Multilevel regression analyses showed that when controlling for other types and components of ill-being and well-being, peace of mind was related to positive affect in dream reports ( $\beta = 0.405$ ,  $SE = 0.155$ ,  $z = 2.620$ ,  $p = .009$ , 95% CI  $LL = 0.102$ ,  $UL = 0.709$ ), whereas symptoms of anxiety were related to negative affect in dream reports ( $\beta = 0.427$ ,  $SE = 0.123$ ,  $z = 3.458$ ,  $p < .001$ , 95% CI  $LL = 0.188$ ,  $UL = 0.673$ ) and to self-ratings of negative dream affect ( $\beta = 0.122$ ,  $SE = 0.058$ ,  $z = 2.094$ ,  $p = .041$ , 95% CI  $LL = 0.008$ ,  $UL = 0.236$ ).

*Conclusions:* Results suggest that dream affect reflects certain aspects of waking ill-being and well-being and may thus possibly serve as a diagnostic or prognostic indicator of mental health in general. Importantly, we argue that peace of mind indicates enhanced affect regulation capacity both in the waking and sleeping state. Thus, peace of mind is an important aspect of well-being that should be systematically integrated into the conceptual and empirical framework of well-being.

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## Psychological Well-being and Subjective Alienation of Social Network Users with Different Levels of Involvement

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**Keywords:** social networking sites users, involvement, psychological well-being, alienation

In modern society social networking sites (SNS) are extremely popular. An analysis of existing studies shows three main hypotheses that explain the behavior of users in social networks: 1) the hypothesis of social enrichment, 2) the hypothesis of social compensation, 3) the hypothesis of "escape from reality" with the aim of improving the psychological well-being [2].

The aim of the current study was revealing the specifics in the psychological well-being of social network users with different level of involvement.

At the first stage of the study, we identified by phenomenological procedure [1] three levels of user involvement (low, medium, high) by three criteria: 1) daily time on SNS; 2) the attitude of relatives (partners): positive/neutral/anxious/negative; 3) the emergence of users subjective anxiety during the time spent on SNS. On the second stage of the study we compared contrast groups – a group of users with low and a group with high levels of involvement used Russian version of questionnaires: Subjective Happiness Scale (SHS), Satisfaction with Life Scale (SWLS), Subjective Alienation Questionnaire (SAQ).

The results show that users with low levels of involvement demonstrated significantly higher levels of subjective experience of happiness and life satisfaction, as well as lower rates of alienation in all spheres of life. In general, users of social networks with a low level of involvement have a higher level of subjective psychological well-being. From this perspective, we suggest that a high level of user involvement can be associated with the hypothesis of "escape from reality" in social networks to improve the level of subjective well-being [2].

We assume that the results of this study can contribute to the development of programs to help people who are seriously hampered by excessive involvement in SNS. In addition, we plan to continue this research and to clarify the psychological factors of users conversion from medium to high level of involvement and the possible emergence of social network addiction.

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## Reading the Mind in the Eyes and Flowing Together

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**Keywords:** flow, optimal experience, collective flow, group collaboration, Theory of Mind

*Background:* There has been a limited but growing literature about social flow, group flow, team flow or collective flow [1]. In order to understand better this psychosocial state of optimal collaboration leading to the high levels of wellbeing, productivity and absorption, we wanted to explore the predispositions leading to this state. More precisely, we were interested in seeing how differing levels of Theory of Mind (TOM) of group members relate to the experience of collective flow. Theory of Mind (ToM) is individual's ability to reason about and infer the mental states of others: emotions, intents, beliefs, desires, pretending and knowledge [2]. Broadly linked to emotional intelligence [3], these abilities are considered to be fundamental to our ability to function well in social settings, while impairment in ToM is a core characteristic of autism spectrum disorders [4].

*Aim:* Recent research on collaboration [5] found that teams of people scoring high on ToM had significantly higher "collective intelligence", the measure of general group effectiveness. Their results indicate that average ToM scores were the only significant predictor of collective intelligence. However, to our knowledge, there are no ToM studies that take into account the aspect of subjective wellbeing in an effective collaboration setting. Therefore, taking into account these findings, we aimed to explore to what extent the ToM dispositions predict the collective flow, the measure of group effectiveness and wellbeing. The aim of this study was to test the relationship between Theory of Mind, the collective flow and creative performance.

*Method:* 348 French engineering students (299 male, age  $M=23.31$ ,  $SD=1.60$ ) from all over the France participated in the study. After completing Reading the Mind in the Eyes Test [6] participants were organized in 72 teams of 5 people on average and took part in a half-day long creativity workshop consisting in group brainstorming on a given innovation topic, idea selection and project elaboration. Self-reported questionnaire composed of flow scale, collective flow items, social identification measure, motivation scale, and self-reported creativity items were administrated to all participants. The effectiveness was measured in terms of creative fluency (number of single ideas generated during the brainstorming phase) and originality of innovation projects (assessed by expert judges).

*Results:* Analysis of results consisted in exploring the link between ToM, subjective states and collaboration effectiveness. Our first analysis revealed that ToM score is not related to any subjective experience measures. However, we found some interesting results concerning



collective flow correlates. Further analysis included mediation tests between collective flow antecedents and collective flow experience.

*Conclusions:* The results are discussed and interpreted in the light of flow theory and psychosocial theories of collaboration.

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## Well-Being of Canadian Armed Forces Single Mothers: Work and Family Stressors and Coping

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**Keywords:** military, well-being, work-family conflict, parent, coping, Canadian Armed Forces

*Background:* The number of single-parent families is growing within the Canadian Armed Forces (CAF), yet the research on the experiences of single military parents remain limited [1]. Single-parent military families experience a combination of single-parenthood stressors and military-life related stressors, including work-family conflict and parental strain. As a result, it is not surprising that single parents report poorer psychological well-being than partnered mothers [2]. Moreover, previous research has suggested that ineffective coping strategies in relation to maintaining work-family balance and dealing with parental strain may exacerbate the situation [3].

*Aim:* This study examined the roles of work-family conflict, parental strain, and coping in well-being of CAF single mothers.

*Method:* Hierarchical regression analyses were conducted to examine the impacts of work-family conflict, parental strain and coping on well-being of single CAF mothers (N = 223).

*Results:* It was found that work-family conflict and parental strain predicted poorer psychological well-being of CAF single mothers. Moreover, coping uniquely predicted their well-being. Specifically, emotion-focused coping was uniquely predictive of poorer and social support of better psychological well-being. Finally, while coping strategies served as important and unique predictors of well-being, they did not buffer the impact of military-life related stress on single mothers.

*Conclusions:* This study illuminates the psychological consequences of single-parenthood among CAF mothers. Not only is there a need to consider the challenges that single CAF mothers face and its impact on their psychological well-being, but it is also important to examine the ways to diminish the path, concentrating on protective factors, such as coping.

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## **From Creative Potential to Creative Achievements: The Role of Emotion-Related Personality Traits**

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**Keywords:** creative potential, creative achievements, creative activities, emotional intelligence, emotional creativity

Numerous studies have examined creativity and its correlates. Part of them shows that creative potential, creative activities and personality traits predict creative achievements, while others concentrate on motivational and environmental factors promoting creativity. However, there is still scarce of information whether emotional characteristics are related to creativity and exactly how are they related. The current study aims to examine the effect of emotional traits on the relationship between trait creativity and creative achievements. Three hundred and twenty individuals (233 women) participated in the study. The creative potential was measured by means of Alternative Uses (AU) and Alternative Instances (IN) tasks; Creative activities and achievements were measured with the Inventory of Creative Activities and Achievements (ICCA); for assessing emotional traits we used the Trait Emotional Intelligence Questionnaire (TEQue) and the Emotional Creativity inventory (ECI). Hierarchical multiple regression was used to assess the ability of creative potential (ideational fluency and originality) and emotional characteristics to predict creative activities and achievements. The results show that emotional characteristics as well as creative potential are important predictors of creative achievements. Emotional intelligence and emotional creativity were tested as moderators of the relationship between creative potential and creative activities and achievements. Moderation analyses (Conditional Process Modeling by Hayes, 2012; Model = 1) showed that the relationship between ideational fluency and creative achievements was moderated by sociability (factor of trait emotional intelligence) (effect = .0809,  $p=.0109$ ) and novelty (aspect of emotional creativity) (effect = .0628,  $p=.0488$ ). Besides those characteristics, important predictors of creative achievements are everyday creative activities that mediate the relationship between trait creativity and creative achievements (effect = .0445, BootLLCI = .0181 BootULCI = .0293). The study provides insight into which emotional aspects can affect the relationship between trait creativity and creative achievements and is helpful for those working in educational settings to unleash students' creative potential.

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## Flourishing at work? A study on workplace mental health promotion policies in Flanders

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**Keywords:** workplace mental health promotion, positive mental health

*Background:* As people spend plenty of time on their job, the workplace offers major opportunities for (mental) health promotion (W(M)HP / workplace health promotion). In WMHP, one of the central questions is on how to organize the working environment in a way that the positive mental health of all employees is promoted, so that they can flourish. Despite the fact that WMHP has yet been described thoroughly as a theoretical concept and has been highlighted in a number of (EU-)policy documents, it remains unclear how well this concept is accepted and incorporated in daily practice.

*Aim:* The aim of this paper is to explore the incorporation of WMHP in Flemish workplaces by analyzing their (mental) health policies.

*Method:* Data for this study were extracted from the three yearly organised Flemish 'Health Policy Survey', 2015, which provides an up to date and clear view of the implementation and maintenance of health promotion in specific settings such as the workplace, and visualizes evolutions throughout the years. The survey addresses specific health topics throughout the domains education, policy and regulations, environmental actions and care.

A large sample of Flemish companies was invited to complete the survey; analyses were performed on a representative, weighed sample of 323 questionnaires.

*Results:* Generally spoken, health promotion policies are poorly adapted by Flemish employers. Hardly 1 in 4 employers organizes at least once a year some education regarding mental health; in 28% of the cases employees are offered some skill training (coping, communication or social skill training). Especially in smaller companies (<50 employees) the expertise and adaptation of WMHP is low. Education settings and workplaces belonging to the quaternary economic sector significantly score better. Companies with personnel working day and night shifts, offer more activities aiming to improve work organisation and working environment, compared to companies that work only during daytime. The results suggest that performed actions are mainly limited to legally required measures (i.e. protecting mental health by reducing work-related risk factors instead of promoting positive mental health).

*Conclusions:* The study results stress the need for raising more awareness about WMHP. The mindset and behaviour of the management (and employees) regarding mental health at the workplace needs to be changed. Enhancing workplace mental health literacy can be a first step. Additionally employers need support for setting up a policy and for (further) implementing all aspects of WMHP. This also includes knowledge about evidence-based interventions strengthening positive mental health in the workplace. At the Flemish Institute for Health Promotion, a number of supportive tools and interventions for W(M)HP have recently been developed and are currently evaluated. They will be shortly discussed.

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## **Appreciative Inquiry as a Tool to Create Student-Centered Learning Environments in Higher Education**

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**Keywords:** teaching and learning, appreciative inquiry

*Background:* Efforts to promote quality teaching and learning in Higher Education have evolved from traditional lecture-based teaching approaches, where the lecturer determines the learning needs of students [1], towards more student-centered approaches where students are invited to co-create the learning experience [2]. This shift is informed by research that suggests that teacher-led methods of instruction result in a lack of learner motivation and engagement [3]. In support of this shift, there has been an increase in the use of innovative, student-centered teaching and learning methodologies where students are expected to play an active role in the learning process [2]. Appreciative Inquiry (AI), which is grounded in the principles of positive psychology, has been cited as one such methodology [4]. Through the implementation of a modified version of Conklin's [4] "preferred classroom" exercise, we employ the practice of AI to provide a cohort of postgraduate management students in South Africa the opportunity to collaboratively determine their ideal learning experience.

*Aim:* The process used to run the AI exercise with a group of 58 post-graduate management students is described. In order to determine the extent to which the exercise laid the foundations for the creation of a student-centered learning environment, student perceptions of the exercise are assessed using a post-exercise questionnaire.

*Method:* Participating students were requested to complete a questionnaire comprising three open-ended questions that captured their reflections following the completion of the AI exercise. Conventional content analysis was used to analyze the data.

*Results:* Analysis of the qualitative data reveals that students valued the opportunity for self-expression provided by the AI. Several themes emerged from the data analysis, suggesting that students gained numerous new insights about their responsibilities in the teaching and learning experience. Most notable, was the realization that they not only have a responsibility towards their own learning, but that they have the power to significantly influence the learning experience of fellow students. By participating in the exercise, students learnt to value and appreciate their own ideas and commit to sharing these. The exercise also sensitized students to the tensions that could occur through collaborative learning, and ways to navigate these are discussed.

*Conclusions:* The research shows that the AI exercise can facilitate the creation of a more student-centered learning environment. The presentation concludes with recommendations as to how the exercise can be improved for future use.

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## Daily Stress and Partial Self-esteem: Implications for Psychological Well-being

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**Keywords:** daily stress, self-esteem, psychological well-being, adults

*Background:* Existing data [2] argues that global self-esteem is associated with depression, to some extent - daily stress, but the effects can vary depending on particular sample, timing, stressors used etc. At the same time few studies concentrate on associations between self-esteem, daily stress and psychological (or any) well-being.

*Aim:* Our study tested if psychological well-being follows the same pattern as in the model with self-esteem, daily stress and depression. We analyzed these associations from the perspective of partial self-esteems and reported comparative analysis for the age, sex, education and location groups.

*Method:* Participants were 311 adults aged 19-65. Methods: self-esteem measured with Dembo-Rubinshtein method [1] (for partial self-esteem we used scales on health, confidence and relations with others), daily stress assessed with a list of daily stressors. For psychological well-being we applied Russian version of C. Ryff scale [3].

*Results:* We confirmed the hypothesis that psychological well-being follows the same pattern within self-esteem and daily stress model as depression. We also proved that general models for partial self-esteem – daily stress – psychological well-being share similar patterns as models with global self-esteem. Comparative analysis suggested that all for factors contribute to a diverse nature of associations between self-esteem, daily stress and psychological well-being. Our data argue that demographic factors together with specifics of partial self-esteem to some extent explain the controversial results obtained in previous studies.

*Conclusions:* Important outcome of our study was that within different self-esteem domains and factors, we can find all the patterns of possible interactions within the model self-esteem – daily stress – psychological well-being, reported for model global self-esteem – daily stress – depression. We can suppose, that variability we found for different self-esteem domains can somewhat explain differences in research data within this field. We can also argue that approaching mechanisms of interaction within the self-esteem – daily stress – psychological well-being (or depression) model from the perspective of complex partial self-esteem can broaden understanding of daily stress functioning and its impact on psychological well-being.

### Acknowledgments

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## Mindfulness-based Flourishing During Pregnancy: The Importance of Identity and Paradox of Intention

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**Keywords:** mindfulness, positive psychology, pregnancy wellbeing, prenatal education, Interpretative Phenomenological Analysis

*Background:* Pregnancy is a natural evolutionary lifespan development. However, the UK healthcare system takes a top-down, paternalistic and deficiency approach to pregnancy and pregnancy self-care. Furthermore, pregnancy is often “*pathologised in research*” [1]. Mindfulness-based interventions for pregnancy take the same deficiency-focus and evidence for their efficacy remains inconclusive [2]. In practice, these interventions are only available to those of high socioeconomic status (SES) devaluing the lived experience of those of low-SES [3].

*Aim:* The study aimed to address these limitations in research and practice by recruiting pregnant participants of a variety of SES to take an online Mindfulness-based Flourishing Programme (MBFP) which integrates positive psychology interventions with mindfulness [4].

*Method:* Three semi-structured interviews were transcribed and analysed using Interpretative Phenomenological Analysis which seeks to qualitatively understand the lived experiences of those taking the MBFP [1].

*Results:* Three themes emerged, which demonstrated how the participants related to the MBFP: the importance of personal identity in taking the MBFP; an interrelationship between participant’s identity and intention and the influence of fixed or flexible time and place when taking the MBFP.

*Conclusions:* The wellbeing intention of the intervention did not influence how the participant experienced the MBFP, suggesting a paradox of intention. When participants were better able to identify with the content of the MBFP, they were better able to integrate mindfulness into their everyday life, even those more resistant to mindfulness.

### Acknowledgments

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## Increasing Emotional Competence: An Evaluation of an Ability-Based Training Program in a Collectivist Context

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**Keywords:** emotional intelligence, emotional competence, ability-based tests, emotion regulation, training

*Background:* The ability to perceive, understand, and regulate emotions, as understood in ability-based emotional intelligence (EI), is an important life skill that can be improved by training programs. However, there are still only few intervention studies with randomized controlled design that include ability tests as outcome measures [1]. Additionally, most of the studies have used samples selected from Western cultures with strong tendencies for individualism.

*Aim:* This study tested whether an EI training program that had been developed and evaluated in an individualistic context is also effective in a collectivistic context [2].

*Method:* The current study used a sample of undergraduate students from Middle Eastern and African countries as well as Turkey selected from a competitive university in Northern Cyprus. Participants were randomly assigned to a training group or a wait-list control group, and responded to a measure of positive and negative affect, an ability measure of emotion regulation, a measure of trait EI, and an ability-based measure of emotional understanding before the training and 1-month after the training. Participants were also asked to provide e-mail addresses of two informants who had known the person well. Informants responded to a single questionnaire (before and 1-month after the training) measuring their own perception of the participant's EI. The 1-day training aimed to make participants aware of the relevance of EI in daily life, to increase their ability to perceive emotions in others, and to teach how to effectively express emotions. Participants also received two follow-up exercises via email for the next four weeks to further practice the skills they had learned. The control group didn't receive any treatment during that period.

*Results:* To analyse the effectiveness of the intervention, a series of repeated-measures ANOVAs were performed: changes in positive and negative affect, emotion regulation, and EI were examined. Time of assessment was used as a within-subjects factor and group as between-subjects factor. Preliminary analyses revealed a significant group by time interaction for emotion regulation, trait EI, and emotional understanding, providing evidence that the participants in the experimental group experienced significant improvements in emotion regulation, EI, and emotional understanding while those in the control group did not. The effect for positive and negative affect was not significant.

*Conclusions:* An evaluation of an ability-based training program showed that the training is promising in increasing emotional competence. The study extended previous research by providing support for the effectiveness of such a program in a collectivist context.

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## **“I Scratch Your Back and Someone Else Will Scratch Mine”: Downstream Reciprocity in the Conditions of a Natural Experiment**

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*Background:* Everything related to human life is connected not only with direct reciprocity and behaviors of “pay-it-forward” type, but also with indirect downstream reciprocity (A → B and C → A) [1]. It assumes that a person who has helped someone, has a better chance of receiving support from others [2] and, at the same time, someone who has caused harm, may meet unfavorable actions of third parties. In other words, “I scratch your back, and someone else will scratch mine” [3]. An important element of this concept is that people gain a good or bad reputation of being empathetic or hard-hearted to others and in the future may expect to receive a similar way of treatment.

*Aim:* The aim of the study was to verify experimentally how much time participants in the research (C) would be able to give to a person (A) who was presented as helping another person (B) (empathically or reluctantly) or not helping (for justified and unjustified reasons).

*Method:* The research was conducted on the group of 64 students – 16 for each experimental condition. While participants were finishing to fill a set of questionnaires (INTE, SES, SWLS, P-Scale, GQ-6, BIH-R, and TRIM-12), sitting on the bench in the corridor, an experimenter’s assistant (B) dropped sheets of papers on the floor, making an impression of real falling. Seeing this, another experimenter’s assistant (A) helped (B) eagerly and empathetically (1<sup>st</sup> condition) or reluctantly (2<sup>nd</sup> condition). In other two conditions, (A) did not help because of real and justified back pain (3<sup>rd</sup> condition) or unjustified excuse (4<sup>th</sup> condition). After that, participants (Cs) were asked to give a hand to (A) to arrange some other papers in the next room where they were observed through the Venetian window by two other experimenter assistants. The observation was needed to see if participants really helped and, in a positive case, how much time they dedicated. The mean age of the respondents was  $M = 21.16$  with  $SD = 2.16$  (range = 19-28 years). Most were women (58%).

*Results:* The one-way analysis of variance showed a significant main effect of observed behavior on time dedicated by (C) to benefit (A):  $[F(3.64) = 10.261; p < 0.000; \eta^2 = 0.339]$ . Students (C) who witnessed altruistic and complaining help of (A) towards (B), devoted more time to support (A) than those who observed the justified and unjustified lack of help. Moreover, we noticed that there were no differences between participants in respect of empathy, self-esteem, life satisfaction, positive orientation, gratitude, hope, and forgiveness, measured through questionnaires they were filling out before experimental manipulation.

*Conclusions:* Similar results were obtained by van Apeldoorn and Schram (2016), noting that the history of helpful behaviors increased the chance of receiving help from third parties due to good or bad reputation. It can be assumed that people treat with friendliness those who are friendly to others, and unwillingly those who lack of kindness [2].

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## Positive Interventions for People with Psychiatric and Intellectual Disabilities

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**Keywords:** positive interventions, mental illness, intellectual disability, psychotherapy, role-playing

*Background:* Current research using action methods and creative dramatics with people with intellectual and psychiatric disabilities is reviewed, with a focus on the uses and distinction between psychodrama and dramatherapy. The Interactive-Behavioral Therapy/Active Cognitive Treatment (IBT-ACT) model is introduced and suggestions for future research are explored.

*Aim:* To discuss the use of adapted methods with people with intellectual and psychiatric disabilities in the widely used evidence-based model of Interactive-Behavioral Therapy/Active Cognitive Treatment (IBT-ACT)

*Method:* To explain adaptations of interventions and process for use with people who have low or no literacy and who may have difficulty with concentration.

*Results:* Participants will learn when to get more information on the techniques as well as research done on the methods and processes of Interactive-Behavioral Therapy/Active Cognitive Treatment (IBT-ACT)

*Conclusions:* Most clinicians and coaches are familiar with the use of role-playing but few have had the opportunity to use all of its potential with positive interventions. Interactive-Behavioral Therapy/Active Cognitive Treatment (IBT-ACT) is an evidence-based model effectively used in the treatment of people with intellectual and psychiatric disabilities that clinicians can learn more about through this presentation.

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## **The Impact of Flourishing on Subjective Experiences of Life Events: Examining the Role of Proactivity and Social Support in a Two-Wave Longitudinal Study**

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**Keywords:** flourishing, life events, the broaden-and-build theory of positive emotions, proactivity, social support

Existing literature demonstrates that flourishing, or high well-being, is not only an indicator of a good life, but also an important prerequisite of future beneficial life outcomes. However, flourishing and languishing people experience both positive and negative/challenging life events, and some findings suggest that they differ in the ways they respond to minor and major life events and daily situations. In order to gain a better understanding of the mechanisms that could explain these differences, the present study examined whether flourishing people tend to accumulate various resources that enable them to sustain high levels of well-being, and cope with different life events. Building upon the broaden-and-build theory of positive emotions, the main aim of the present study was to examine the role of proactivity and social support in the relationship between flourishing and subjective experiences of life events. We conducted a two-wave longitudinal study among 921 adults (age range 18-78 years; average age  $M=37.39$ ,  $SD=11.76$ ;  $N_{\text{male}}=159$ ,  $N_{\text{female}}=762$ ), within a research project the Croatian Longitudinal Study of Well-Being (CRO-WELL). At Time 1, we assessed flourishing, personality traits, occurrence of different types of life events and the subjective experiences of these events, as well as living conditions. One year after, at Time 2, we again assessed life events and subjective experiences of these events, as well as personal (proactivity), and social resources (the availability of social support). We hypothesized that proactivity and social resources will have indirect-mediation effects between flourishing at Time 1, and subjective experience of life events (positivity and negativity) at Time 2. The analyses provided support for the hypothesized research model: Even after controlling from personality and living conditions, the more flourishing people reported at Time 1, the more personal and social resources they had at Time 2 (one year after). This, in turn, led to higher ratings of positivity of life events, and lower ratings of negativity of life events. In other words, these findings suggest that accumulation of personal and social resources can be considered one of the mechanisms that can explain how flourishing people-who feel good and function effectively even in the face of adverse situations- maintain their high levels of well-being throughout time.

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## The Impact of Values on the Flourishing of Singaporeans

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**Keywords:** flourishing, values, List of Values, Singapore

*Background:* Flourishing as an indicator of wellbeing has garnered considerable research interest. It encompasses an individual's happiness and her/his contributions to the happiness of others. Values and their impact on wellbeing outcomes have also been an important area of research in the social sciences.

*Aim:* Many factors influence a person's flourishing. Specifically, this study investigates the impact of values, and the implications of understanding which values are important for flourishing.

*Method:* The dataset is a nationally-representative sample of 1503 Singaporeans surveyed in 2016. Singaporeans were asked about their personal values using the List of Values (LOV) scale [1], namely Sense of Belonging, Excitement, Fun and Enjoyment, Warm Relationships with Others, Self-fulfilment, Being Well-respected, Sense of Accomplishment, Security, and Self-respect. They rated the nine values on a 6-point scale (1= Not important at all to 6= Very important). For the Portrait Values Questionnaire (PVQ), Singaporeans were given 21 descriptions of different individuals and indicated to what extent they were like the persons described (1=Not like me at all to 6=Very much like me). Four Higher Order Values were derived through factor analysis: Openness, Conservation, Self-transcendence, and Self-enhancement [2]. Singaporeans indicated on the 8-item Flourishing Scale [3] whether major aspects of psychological wealth were present in their lives, and whether their lives had purpose and meaning. To determine the impact of values (LOV and Higher Order Values) on Singaporeans' flourishing, a regression analysis was conducted with the values as independent variables and the Flourishing scale's factor score as the dependent variable.

*Results:* Factor analysis of the 21 statements in the PVQ confirmed the existence of the four Higher Order Values with good reliability ratios (Cronbach alphas ranged from 0.74 to 0.78). The proposed single-factor structure of the Flourishing scale was also supported with good scale reliability (Cronbach alpha of 0.891). For the LOV, Sense of Belonging, Warm Relationships with Others, Fun and Enjoyment, Being Well-respected, and Self-fulfillment have a significant positive impact on Singaporeans' flourishing. For the PVQ, Self-transcendence and Conservation have a significant positive impact.

*Conclusions:* The results provided insights into which values had an impact on Singaporeans' flourishing. While values are fairly stable over time, it could be possible to encourage Singaporeans to embrace certain values to enhance their flourishing. Implications from this study should consider the socio-cultural context of Singapore, and how values have evolved over the years.



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## Associations Between Locus of Control, Coping, and Quality Of Life Changes in Patients with Breast Cancer or Melanoma

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**Keywords:** quality of life, coping, locus of control, breast cancer, melanoma

*Background:* Lately, several studies have found that the coping strategies, the locus of control (LOC), and the Health-Related Quality of Life (HRQoL) can change over time. Nevertheless, no longitudinal studies have focused on their association over time, comparing different types of cancer. Breast cancer is the most common cancer in women. They receive more impairing treatments and more social support [1], in contrast with melanoma patients who usually look more healthy. Studying the association of LOC, coping and HRQoL over time can allow identifying the best therapeutic supportive care strategies for HRQoL improvement related to specific cancer patients type.

*Aim:* To test the association of coping and LOC changes, with the change of HRQoL over time in breast cancer and melanoma patients.

*Method:* The Brief Coping (coping), the Cancer Locus of Control Scale (LOC) and the EORTC QLQ-C30 (HRQoL) were administered to recently diagnosed breast cancer (N=215) and melanoma (N=78) patients at 1, 6, 12 and 24 months post-diagnosis (mpd) [2]. The association of coping and LOC, with the evolution of each dimension of HRQoL over time, was assessed using mixed models.

*Results:* At baseline, the HRQoL levels were almost always higher for breast cancer than for melanoma. In breast cancer some HRQoL scores decreased steeply then increased slightly and remained mainly stable afterwards, but never reaching their baseline levels. Differently, some melanoma patients HRQoL scores linearly increased or decreased over time. For both types of cancer, the perceived control over the course of illness had a positive association with the evolution of HRQoL, whereas negative coping had a negative association. Emotional coping and the internal causal attribution, for breast cancer only, and, religious LOC, for melanoma patients only, had a negative association with the change of HRQoL.

*Conclusions:* It seems that psychological support, that takes into consideration the patients' coping strategies and beliefs, should be specific according to the type of cancer and to the time post-diagnosis.

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## **Autotelic Individuals Who Enjoy Flow Experience More Are More Satisfied with Their Lives**

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**Keywords:** autotelic personality, flow, flow state, flow proneness

*Background:* Autotelic personality is a constellation of stable dispositions that facilitates flow experience—a state of simultaneous concentration and enjoyment [1]. The meta-skill model and receptive–active model in the flow literature together suggest seven facets of autotelic personality[2][3]: (a) curiosity and interest in life, (b) persistence, (c) low self-centeredness, (d) intrinsic motivation, (e) enjoyment and transformation of challenges, (f) enjoyment and transformation of boredom, and (g) attentional control. Autotelic personality should be associated with more frequent and intense flow experience, and in turn more satisfaction with life.

*Aim:* To examine whether autotelic individuals characterized by these seven dispositions are more likely to enjoy flow state and satisfy with life.

*Method:* A two-wave survey study and an experiment were conducted. In both studies, participants first filled out a newly developed 26-item scale measuring the seven dispositions of autotelic personality. This new autotelic personality scale has demonstrated good content and construct validity [5]. In the survey study (Study 1), 214 participants also filled out the Big Five Inventory [4] and the Swedish Flow Proneness Questionnaire [6]; three weeks later, they completed the Satisfaction with Life Scale [7]. In the experiment (Study 2), 239 participants were randomly assigned to play easy, medium, or hard anagrams (word scrambling tasks) and reported their flow state during the game.

*Results:* In Study 1, results from path analysis showed that autotelic personality significantly predicted flow proneness, controlling for the Big Five personality factors,  $\beta = .48$ ,  $p < .001$ . Furthermore, flow proneness mediated the relationship between autotelic personality (Time 1) and satisfaction with life (Time 2), indirect effect  $\beta = .34$ ,  $p < .001$ . In other words, participants high in autotelic personality were also satisfied with their life more, through enjoying flow experience more frequently in daily lives. In Study 2, autotelic personality had a significant main effect on flow state, controlling for the difficulty of the anagram,  $\beta = .41$ ,  $p < .001$ . It also accounted for 17% variance of flow state above and beyond the effect of anagram difficulty ( $\Delta R^2 = .17$ ).

*Conclusions:* The results of the two studies converge and suggest that autotelic personality, as indicated by the seven dispositions, is positively associated with the intensity of flow state in an experimental task, the tendency of experiencing flow in life (flow proneness), and in turn satisfaction with life.

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## **Focusing on What is Going Right: How Can Positive Psychology Help those with a Comorbidity of Substance Misuse and Mental Illness (Dual Diagnosis)?**

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**Keywords:** positive psychology intervention, dual diagnosis, substance misuse, mental illness, comorbidity

*Background:* Dual diagnosis (DD) prevalence is a concern in both mental health and substance misuse services [1]. There is a paucity in addiction research on psychological treatment in vulnerable and challenging populations, such as clients with psychiatric comorbidity [2]. Although positive psychology (PP) research is in its infancy in relation to addiction and is virtually non-existent in DD, findings in the fields of substance misuse and mental health so far are showing PP's great potential.

*Aim:* The aim of the present PhD research was to explore how Positive Psychological Interventions (PPIs) can be used to help people with DD overcome their addiction, as well as manage their mental health problems and prevent relapse.

*Method:* The PhD comprises of two parts. First, a 12-week PPI was designed and delivered to two groups of individuals with DD ( $n = 10$ ) at the Bolton Integrated Drug and Alcohol Service (BIDAS, Bolton, UK) to explore the impact of the programme and the relevance of PP in DD recovery? Mixed methods were used for evaluation based on questionnaires, interviews and focus groups with both clients and staff. It was hypothesised that by not focusing on the problems of substance use and mental illness, but empathetically attending to them when necessary, the intervention would lead to (1) an increase in positive experiences and well-being, (2) a decrease in substance use/dependence, and (3) a reduction in mental illness. Based on the results of the evaluation, in the second part, the intervention was revised and delivered to two groups of psychosocial intervention (PSI) workers ( $n = 17$ ) at the same service. The aim of this practitioner intervention/workshop was to enable PSI workers to deliver a PPI to their clients, integrate PP with their current approaches, and use it for their own well-being and prevent burnout, as well as to further evaluate the programme.

*Results:* The hypotheses were partially supported with the results showing an increase on a number of PP measures, a reduction of symptoms of depression and anxiety, and a decrease in substance use/dependence immediately and 3 months after the intervention. Clients' narratives provide support for these findings. Practitioners' accounts clearly show that although many of the PP concepts are already used in treatment, more focus on the positive is necessary. However, clients' readiness to change and some downsides ought to be considered. The data acquired from the practitioner intervention are being analysed at present.

*Conclusions:* PP has the potential to advance DD recovery and provide new ways of working with this challenging client group. The researcher seeks to find ways how this fairly new discipline may help conquer addiction and mental health problems and prevent relapse by integrating positive dimensions into existing treatment, and ultimately into the lives of those with such complex needs.

### **Acknowledgments**

I would like to express my heartfelt gratitude for the endless support of my director of studies, Professor Jerome Carson, my second supervisor, Dr Gill Allen, and my external supervisor, Dr Mark Holland, dual diagnosis consultant nurse. I would also like to extend my gratitude to the Bolton Integrated Drug and Alcohol Service for the opportunity to work with their clients and staff.

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## **An Original Russian Version of the Test of Existential Motivations: Measuring Existential Fulfillment as Another Possible Approach to Assessing Psychological Well-being**

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**Keywords:** existential fulfillment, fundamental existential motivations, psychological well-being

We present a new Russian-language instrument measuring existential fulfillment and based on the hierarchical structure of the four existential fundamental motivations developed by A. Längle [1, 2]. Based on phenomenological descriptions and focus groups, we created a set of 93 items. Using hierarchical cluster analysis, expert-rating procedure and confirmatory factor analysis with cross-validation in an independent sample we generated a hierarchically structured set of 36 items grouped into 4 fundamental motivation scales forming a general index of existential fulfillment. The scales demonstrated acceptable reliability: Cronbach's  $\alpha$  was in the .79-.88 range for the fundamental motivation scales and .93 for the general existential fulfillment score [3]. The results of four separate studies (total sample of 5600 respondents) indicates the new Test of Existential Motivations (TEM) is a reliable instrument with a theoretically predicted structure and provide preliminary evidence of its validity in research settings.

We sought evidence of convergent and discriminant validity of the scales by using correlational and multiple regression analyses of their associations with indicators of emotional, social, and psychological well-being, subjective happiness, satisfaction with life, basic psychological need satisfaction, self-esteem, internal locus of control, as well as alienation and psychopathology. The findings support the convergent validity of existential fulfillment indicators against well-being measures based on different theoretical approaches, as well as discriminant validity of specific existential fundamental motivation scales.

The strong associations of TEM scales with a range of subjective and psychological well-being measures are in line with the theoretical understanding of existential fulfillment as a well-being construct. At the same time careful theoretical analysis is needed to analyze the parallels and the differences between existential analysis and other eudaimonic well-being theories as well as development of TEM questionnaire in other languages.

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## Positive Education: How is it Working in Public Schools?

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**Keywords:** positive education, public schools, young people, effectiveness, well-being measurement

*Background:* The delivery of positive education has been rapidly growing and there is early evidence that the well-being of young people in schools is improving as a result of these programs [1, 2]. Examining the well-being effects of positive education in a variety of school settings, such as private and public schools, is important as there may be significant contextual factors that can influence the outcomes achieved.

*Aim:* The aim of the current study is to examine if an exemplary positive education program being delivered in a private school in Victoria, Australia can be successfully tailored to a public school setting to achieve beneficial well-being effects for Year 10 students despite the more resource-limited context.

*Method:* Two hundred and eighty two students aged 15 years from two public schools in Australia participated in the study. Of these 100 students received a positive education program, including teacher training, and 182 students served as the control participants who did not receive any explicit positive education. Both teachers and students were consulted about the relevance of the positive education program. All participants completed a battery of well-being measures at baseline, post intervention and 6 month follow-up.

*Results:* Despite intervention participants receiving only four out of a possible 16 positive education sessions, using mixed model ANOVAs, there was a significant improvement in psychological well-being, social relationships, school engagement and accomplishment, physical health and psychological ill-health for the positive education participants compared with the control participants. Effects were most salient at post intervention and to a lesser extent at the 6 month follow up.

*Conclusions:* Study findings are encouraging in that they provide initial support for conducting a student needs analysis and delivering aspects of positive education that align with their needs rather than delivering an extensive generic positive education program. This tailored approach may address the issue of crowded curricula and value for money particularly in public schools where limited resources is often an issue.

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## **Mindfulness Based Intervention for People Living With HIV: A Pilot Study**

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**Keywords:** HIV, Internalized-Stigma, mindfulness, acceptance, well-being

*Background:* In the last few years, HIV has become from a fatal into a chronic disease. However, its physical, psychological and social consequences still have a great impact on the quality of life of PLWH (People Living With HIV). In order to minimize them, it is relevant to assure the adherence to treatment. Among the different variables involved in this process, positive affect and stigma stand out with a direct and negative association with adherence, respectively. In particular, it highlights internalized stigma, which is related to a low self-acceptance and self-esteem and a high self-loathing.

*Aim:* The main objective of this study is to increase positive affect, self-acceptance and well-being of PLWH through a Mindfulness Based Intervention (MBI).

*Method:* A MBI was designed and conducted with six PLWH with pre and post measures. Data analysis was comprised by group and intra-subject comparisons with Wilcoxon test and RCI Statistic, respectively.

*Results:* In the line with the aims, the results obtained show an increase in self-acceptance, act with awareness, positive affect and wellbeing.

*Conclusions:* Considering the results, MBI has been effective to achieve the goals set. Therefore, Mindfulness seems to be a useful tool to improve protective variables and to reduce the risk ones that are related to internalized stigma. In conclusion, future research lines could be focused on the design and validation of a MBI to reduce internalized stigma in PLWH.

## A Strengths-based Training to Overcome Academic Procrastination

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**Keywords:** academic procrastination, intervention study, positive psychology, character strengths

*Background:* One of the causes of academic failure among students is academic procrastination (Solomon & Rothblum, 1984; Steel, 2007). This proposal is based on a study previously published in *Frontiers in Psychology* (Visser, Schoonenboom, & Korthagen, 2017) in which we describe an intervention to overcome academic procrastination which is built on principles from positive psychology.

*Aim:* Our aim was to develop insight into the effects of promoting awareness of character strengths and overcoming inner obstacles on students' tendency to procrastinate.

*Method:* Thirty-one students formed two experimental groups: group A ( $n = 14$ ; 4 men, 10 women;  $M$  age = 18.07,  $SD = 0.10$ ) and group B ( $n = 17$ ; 4 men, 13 women;  $M$  age = 18.18,  $SD = 1.23$ ). The other students formed the control group ( $n = 23$ ; 1 man, 22 women;  $M$  age = 17.78,  $SD = 1.09$ ). Students' academic procrastination was measured with the subscale procrastinatory study behavior of the Dutch Academic Procrastination State Inventory (APSI; Schouwenburg, 1994, 1995). The intervention consisted of four three-hour group meetings during a period of six weeks. Themes in the training sessions were: Session 1: Discovering one's character strengths. Session 2: Withitness and taking control. Session 3: The power of ideals, and the difference between limiting and helping thoughts. Session 4: Conversation between the academic procrastination self and the control self.

*Results:* The results show a statistically significant difference in mean academic procrastination ( $F_{(1,43)} = 6.789, p = 0.01$ ) after the intervention between the intervention groups and the control group. Belonging to an intervention group accounted for 14% of the variance (effect size:  $\eta^2 = .14$ ).

*Conclusions:* The promotion of awareness of the tension between character strengths and limiting thoughts, in combination with guidelines for overcoming the tension by being aware of one's ideals and character strengths, appears to have a strong potential for diminishing academic procrastination behavior.

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## Fully Accepting Existence: Positive Orientations toward Time and Nature are Linked to Neutral Death Acceptance

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**Keywords:** neutral death acceptance, time perspectives, nature connectedness, engagement with natural beauty

*Background:* A cognitive awareness and emotional acceptance of our own finitude (i.e., existential acceptance or neutral death acceptance; NDA) has been considered a key element of a fulfilled, authentic, and compassionate life by many authors<sup>e.g., 1,2</sup>. Recently, death has been labelled a ‘new frontier’<sup>3</sup>, and NDA the ‘essence’<sup>4</sup> of positive psychology. Yet, empirical research into dispositional predictors of NDA is scarce. Terror management theory research shows that, when applying denial-based coping with mortality (i.e., the opposite of NDA), people distance themselves from phenomena that remind them of their own finiteness. We propose that open and engaging orientations toward potentially death-reminding phenomena (i.e., nature, the transient present, and one’s future) may foster NDA.

*Aim:* The goal of the present study was to investigate possible psychological predictors of NDA. We hypothesized that nature connectedness, engagement with natural beauty (EWNB), eudaimonic (i.e., mindful and flow-prone) present perspective (PE), positive future perspective (FP), and consideration of long-term future consequences (CFC-F) would be positively correlated with NDA. Furthermore, we expected EWNB to predict NDA beyond engagement with moral and artistic beauty, and PE to predict NDA beyond hedonistic present perspective (PH).

*Method:* Students from Russia (N=690) and Canada (N=393) were asked to complete the Present Hedonistic subscale of the Zimbardo Time Perspective Inventory, the modified Balanced Time Perspective Scale, the Consideration of Future Consequences-14 scale, the Engagement with Beauty Scale (EWB), the Nature Connectedness Scale, and four subscales of the Death Attitude Profile revised.

*Results:* While both future perspectives significantly correlated with NDA in the Russian sample (with CFC-F having the strongest correlation with NDA among all variables), their correlations with NDA were either not significant (FP) or only marginally significant (CFC-F) in the Canadian sample. All the other hypothesized correlations with NDA were significant and positive in both samples. Moreover, when all three subscales of the EWB were used to predict NDA, EWNB was the only significant predictor in the Canadian sample and the strongest predictor in the Russian sample. When both present time perspective variables (PE and PH) were used to predict NDA, PE was the only significant predictor of NDA in both samples.

*Conclusions:* Overall the study suggests that open and engaging orientations toward the present, future, and nature are linked to existential acceptance. The role of future time perspectives in predicting NDA may differ between cultures. Possible implications for individual, social, societal, and environmental wellbeing are discussed in the context of Terror and Meaning Management Theory.

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## Measurement Instrument Development for the Collective Zone of Proximal Development - The Pilot Study of the Antecedents for Team Flow

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**Keywords:** team flow antecedents, collective zone of proximal development, measurement development, complexity theory

*Background:* Instruments measuring team flow experience have been developed and validated in a variety of populations and for various occupation types [1]. However, measurement tools for the antecedents of team flow is rarely seen in the field of positive psychology apart from van den Hout and his colleagues' work [2].

*Aim:* Based on the theoretical framework of the Complexity Theory and the empirical evidence from 20 hours of video observations on four task teams, the Collective Zone of Proximal Development Survey (CZPD) with an item pool of 49 questions was developed to assess the collaborative structure of team dynamics, which is proposed to be the antecedents of the experience of team flow.

*Method:* using a sample of 209 participants with teamwork experiences from a wide range of professional background, exploratory and confirmatory factor analyses supported a four-dimensional model of the CZPD.

*Results:* the result demonstrated that there are 29 items with satisfactory factor loadings ( $Mdn=.61$ ), adequate goodness of fit indices and strong internal consistency (Cronbach's  $\alpha = .84$ ) are to be included in the final version of CZPD. There are four dimensions included, namely *decentralised control*, *idea interaction*, *redundancy* and *idea diversity*.

*Conclusions:* This pilot study developed and tested the factorial validity of the CZPD survey, which is purposed to serve as the antecedent of team flow experience. The four dimensions identified in CZPD are considered as the vantage points of intervention for practitioners planning to promote team flow experience in the work place. CZPD could also be used as a monitoring tool for teams aiming at building and maintaining an effective collaboration climate. Limitation of the study and future perspective is discussed.

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## Examining Positive Schooling: On the Relations Between Character Strengths, School Satisfaction, Enjoyment of Learning, Academic Self-Efficacy, and School Achievement

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**Keywords:** character strengths, school satisfaction, enjoyment of learning, academic self-efficacy, school achievement

*Background:* What factors contribute to positive schooling? The present study followed the theoretical assumptions of a “schooling-related engine model of well-being” [1] that describes various aspects contributing to positive schooling like input variables (e.g., students’ personality traits), process variables (e.g., students’ emotional and cognitive evaluations), and outcome variables (e.g., students’ engagement and achievement). This context specific model [1] based on a more general engine model of well-being [2].

*Aim:* The aim of the present study was to examine the relations between students’ endogenous input variables (i.e., character strengths [3]), process variables (i.e., subjective well-being-related processes like school satisfaction, enjoyment of learning [4, 5] as well as a mastery-related process like academic self-efficacy [6]), and school achievement as outcome variable. It was expected that students’ character strengths are positively related to students’ school satisfaction, enjoyment of learning, academic self-efficacy, and school achievement. Furthermore, it was expected that the specific process variables mediate the relations between relevant character strengths and school achievement.

*Method:* A sample of 300 German students (aged between 10 and 17 years;  $M = 13.20$  years;  $SD = 2.03$ ) completed web-based self-report measures of all key variables (i.e., 24 character strengths, school satisfaction, enjoyment of learning, academic self-efficacy, and school achievement).

*Results:* Results showed that specific character strengths were substantially positively related to school satisfaction and enjoyment of learning (e.g., love of learning, zest), academic self-efficacy (e.g., perspective, hope), and school achievement (e.g., perseverance, perspective). Mediation analyses supported the assumption that both well-being-related and mastery-related processes (fully or partially) mediated the relations between character strengths as inputs and school achievement as outcome.

*Conclusions:* The findings of the present study underscore the benefit of studying inputs, processes, and outcomes simultaneously to better understand the interplay of such relevant variables and their role for positive schooling [1]. Character strengths matter for positive schooling as they are directly positively associated with students’ satisfaction and enjoyment at school, academic self-efficacy beliefs, and school achievement. Furthermore, processes like students’ school satisfaction and academic self-efficacy (both cognitive evaluations) and enjoyment of learning (emotional evaluation) emerge as relevant mediating factors in this

context. Hence, both subjective well-being-related as well as mastery-related processes matter in the context of positive schooling. Furthermore, limitations of the present study, future directions, and implications are discussed.

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## Thought Developments in Positive Psychology: The Third Wave and Post-Disciplinary move

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**Keywords:** disciplinary development, focus and assumptions, second wave, third wave, multi-and transdisciplinarity.

*Background:* Thoughts about the focus of positive psychology, meta-theoretical assumptions and preferred topics, theories and methods changed over time and seem to move more or less every decade to some new major assumptions.

*Aim:* The aim of this position paper is to briefly describe some notions of the first two waves of positive psychology as a scientific discipline, and then elaborate on signs noticed of an emerging third wave of thinking about the empirical focus, theories, approaches and metatheoretical assumptions in positive psychology.

*Method:* A narrative literature review was conducted and trends in developments abstracted.

*Results:* The first wave and decade of positive psychology (PP) propagated that the focus should specifically be on the neglected area of strengths and what is right with people. Empirical studies unearthed many specific strengths and characteristics of feeling good and functioning well, key constructs were hypothesized and some specific theories emerged. A quantitative approach was followed from with positivist assumptions. The second wave was characterized by recognition that an exclusive focus on the positives is hampering a deeper understanding of well-being and that both the positives and negatives of life should be taken into account and the dialects thereof understood. Explorations of the validity of specific constructs in various cultural contexts came to the forefront with a focus on language and in some cases on untranslatable terms. Trends from the first wave also continued. Signs of a developing third wave in thoughts and assumptions are emerging although tendencies from the first two waves still continue. Signs of a shift in focus and assumptions of the third wave are amongst others: a focus on integration, more complex models taking interconnectedness and dynamics into account, an effort to understand the interactions and dynamics among individuals and the wider cultural and socio-ecological contexts in well-being, and assuming a relational ontological perspective. Mixed method approaches are coming stronger to the forefront, with explicit recognition of the contribution of qualitative approaches for a deeper understanding of well-being. Multilevel analytical strategies are coming in vogue in quantitative studies. The most prominent shift characterizing the third wave is the move to a post-disciplinary phase noticeable in the increase of multi-, inter- and transdisciplinary research on well-being.

*Conclusions:* The development of PP as scientific discipline shows shifts in the assumed importance of specific empirical content and topics, methods used, and underlying steering thoughts across decades. We now identify markers signaling a third wave of thinking. This is to an extent part of the normal developmental processes of differentiation and integration tak-



ing place in a new scientific field, but is also reflecting changes in thought processes linked to new evolving and integral knowledge patterns of postdisciplinary discourses. These trends have implications for the planning of future research on well-being.

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## Enhancing Positive Emotions and Reducing Negative Emotions of Chinese University Students: An Exploratory Intervention Study in a General Education Course

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**Keywords:** team-based learning, intervention, achievement emotions, emotional well-being, Chinese university students

*Background:* Although an increasing body of research shows the positive relationships between positive achievement emotions (enjoyment and hope) and students' learning strategies, and academic achievement, the majority of studies were cross-sectional in nature and typically conducted in Western countries [Pekrun, 2006,; Pekrun, Goetz, Frenzel, Barchfeld, & Perry, 2011; Pekrun, Lichtenfeld, Marsh, Murayama, & Goetz, 2017].

*Aim:* This study extended previous achievement emotions to a sample of Chinese university students by using an experimental design.

*Method:* An intervention approach termed Team-based Learning (TBL) was implemented in four sessions of a general education breath course in Hong Kong Chinese students. Two classes of students were involved (N=80). One class was treated as experimental, the other was control.

*Results:* The results showed that TBL produced significantly positive effects on enhancing students' positive emotions (learning-related enjoyment and hope), meanwhile significantly reducing students' negative emotions (learning-related boredom and anxiety) in the experimental class. In the control class, both enjoyment and hope increased, while both boredom and anxiety decreased. However, these changes of emotions in the control class were not significant.

*Conclusions:* TBL may be a promising intervention approach to promote university students' emotional well-being in terms of their learning-related emotions. Further research by increasing sample size and expanding to other courses and groups is needed.

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## Teaching Happiness and Positive Psychology: A Chinese Perspective

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**Keywords:** positive education, China, Hong Kong, happiness, positive psychology

Over the past 15 years, I have been actively promoting positive education in China and Hong Kong. For my university teaching, I offered the first *Positive Psychology* course (in 2008) as well as the first *Happiness* course (in 2015) in Hong Kong universities. During my teaching, I have been incorporating Chinese cultural elements into my teaching and proposed the Five-ful (福) model for the Chinese, including mercifulness (仁福)、peacefulness (和福)、cheerfulness (乐福)、respectfulness (敬福)、playfulness (玩福). Core to these five elements is the Confucian call for internal harmony of “he” as well as the Taoist’s call for internal transcendence of “let-go”. In addition, I have been conducting pre-and-post tests of effectiveness of my teaching, using a battery of psychological scales/measures. The results show significant improvements on students’ subjective happiness, life satisfaction, and non-depression over the 16 weeks of teaching. For my public engagements, I have been giving public talks and making TV shows to promote the key concepts of positive education, including creativity, flow, gratitude, humor, optimism, resilience, and subjective-happiness, etc. To facilitate such works, I have also made other innovative products, including books (in Chinese), poker cards, and TV/DVD programs, etc. I will illustrate my works and present my findings during my talk.

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## Individual Differences in Time Orientation, Pacing Style, and Their Relationship with Psychological Well-being

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**Keywords:** polychromic time orientation, monochronic time orientation, pacing style, psychological well-being

*Background:* In today's fast paced world, mental health of adults face rapid changing competition needs to be concerned. Everyone in a modern society deal with many things in the daily lives. If people don't arrange their time well, they are unhappy and burn out probably. Previous studies on well-being from the eudaimonic perspective have focused on some aspects of individual difference such as personality, gratitude [1], cognitive emotion regulation [2], and humor style [3]. As mentioned, Time is important limited resource people own to complete all kinds of tasks and is little explored theme in psychological well-being studies. Individuals' time orientation and pacing style are included to explore the relationships with psychological well-being. As a monochron, people tend to concentrate on one task at a time and schedule with priorities well. On the other hand, a polychron prefers to do many things at a time and is good at multi-tasking [4]. In addition, people have their preference and tendency on allocating limited time and energy before the deadline of many tasks. The way individuals orientate and pace their time approaching deadlines is central to affect lifestyle decisions and work-related behaviors and outcomes [5].

*Aim:* The aim of this study was to examine the relationships among time orientation (i.e. polychromic and monochronic time orientation), pacing style and psychological well-being in a sample of 434 participants (aged from 19 to 64 years) in Taiwan.

*Method:* Data were collected by administering survey instruments. Time orientation was assessed by the Modified Polychronic Attitude Index 3 (MPAI3) [6]. The reliability was evaluated using Cronbach's alpha, which was .71 and .76 for polychronic and monochronic time orientation respectively. Compared with the scores on polychromic and monochronic time orientation subscales, participants were assigned to one of time orientation groups based on higher scores. There were 110 participants with polychromic time orientation and 315 participants with monochronic time orientation. Nine participants were not identified because of the same scores on both time orientation subscales. Pacing style was assessed using five graphs to identify five personal styles of time allocation on a continuous scale. Scores ranged from 1-5 represent an early action style to a deadline action style [7] [8]. Participants were classified into five pacing style groups based on their responses (n of the group with an early action style= 45; n of group with moderate tendencies toward the early action style= 87; n of the group with a steady action style= 87; n of the group with moderate tendencies toward the deadline action style= 197; n of the group with a deadline action style= 75). A 18-item short version psychological well-being scale was used and there are three items per each of the six areas of Ryff's psychological well-being: positive relations with others, autonomy, self-acceptance, environmental mastery, personal growth, and sense of purpose in life [9].

Cronbach’s  $\alpha$  ranged from .72 to .83 for six domains were obtained, indicating acceptable reliabilities for the sub-scales.

*Results:* Individual differences that were explored whether they relate to the level of well-being experienced by individuals were time orientation and pacing style.

Table 1 showed the independent-sample t-test results of whether there is a significant difference of well-being based on participants’ time orientation groups divided into polychronic and monochronic orientation separately. As seen in Table 1, the results demonstrated that there are statistically significant differences in total psychological well-being, positive relations with others and autonomy by time orientation group ( $t=2.156, p=.032, p<.05$ ;  $t=2.298, p=.002, p<.01$ ;  $t=3.004, p=.003, p<.01$ , respectively). Participants with polychronic time orientation had higher experienced psychological well-being, positive relations with others and autonomy than those with monochronic time orientation.

**Table 1**

	Time Orientation	N	Mean	SD	t	p
Relation	Polychronic	110	14.600	2.435	2.298**	0.002
	Monochronic	315	13.946	2.614		
Autonomy	Polychronic	110	13.100	2.548	3.004**	0.003
	Monochronic	315	12.219	2.682		
Mastery	Polychronic	110	13.546	2.725	1.099	0.273
	Monochronic	315	13.222	2.633		
Growth	Polychronic	110	15.555	1.989	0.224	0.823
	Monochronic	315	15.505	2.018		
Purpose	Polychronic	110	14.018	2.538	1.447	0.149
	Monochronic	315	13.578	2.816		
Acceptance	Polychronic	110	12.509	2.654	0.951	0.342
	Monochronic	315	12.200	3.027		
Toal Well-being	Polychronic	110	83.327	10.681	2.156*	0.032
	Monochronic	315	80.670	11.284		

\* $p<.05$ , \*\*  $p<.01$

As seen in Table 2, results showed significant differences in positive relations with others ( $F = 3.944, p= 0.004, p<.010$ ), autonomy ( $F = 3.229, p= 0.013, p<.05$ ), self-acceptance ( $F =4.124, p= 0.003, p<.01$ ), environmental mastery ( $F = 17.322, p= 0.000, p<.001$ ), personal growth ( $F =3.084, p= 0.016, p<.05$ ), sense of purpose in life ( $F = 6.923, p= 0.000, p<.001$ ) and total psychological well-being scores ( $F = 9.217, p= 0.000, p<.001$ ) due to differences in individuals’ pacing styles.

A positive significant relationship was found between psychological well-being and pacing style. Post Hoc Tests indicated that participants with a deadline action style experienced significant lower psychological well-being than those with other pacing styles (mean difference was -9.120 compared with the group of early action pacing style,  $p=.000$ ; mean difference was -9.161 compared with the group of moderate tendencies toward the early action style,  $p=.000$ ; mean difference was -7.987 compared with the group of steady action style,

$p=.007$ ; mean difference was  $-4.614$  compared with the group moderate tendencies toward the deadline action style,  $p=.016$ ).

For positive relations with others, participants with a deadline action style experienced significant lower psychological well-being than those with moderate tendencies toward the early action style and steady action style. The mean difference was  $-1.286$  ( $p=.013$ ) and  $-1.787$  ( $p=.012$ ) respectively. For autonomy, participants with moderate tendencies toward the deadline action style experienced significant lower psychological well-being than those with an early action pacing style (mean difference was  $-1.371$ ,  $p=.016$ ). For self-acceptance, participants with a deadline action style have significant lower psychological well-being than those with an early action style and moderate tendencies toward the early action style. The mean difference was  $-1.618$  ( $p=.027$ ) and  $-1.725$  ( $p=.002$ ) separately.

For environmental mastery, participants with a deadline action style and moderate tendencies toward the deadline action style both have significant lower psychological well-being than those with a steady action style, moderate tendencies toward the early action style and an early action style (mean difference of the group of deadline action style with the group of early action pacing style was  $-3.276$ ,  $p=.000$ ; mean difference of the group of deadline action style with the group of moderate tendencies toward the early action style was  $-2.366$ ,  $p=.000$ ; mean difference of the group of deadline action style with the group of steady action style was  $-2.720$ ,  $p=.000$ ; mean difference of the group of moderate tendencies toward the deadline action style with the group of early action pacing style was  $-1.950$ ,  $p=.000$ ; mean difference of the group of moderate tendencies toward the deadline action style with the group of moderate tendencies toward the early action style was  $-1.041$ ,  $p=.010$ ; mean difference of the group of moderate tendencies toward the deadline action style with the group of steady action style was  $-1.395$ ,  $p=.033$ ). And participants with a deadline action style have significant lower psychological well-being than those with moderate tendencies toward the deadline action style (mean difference was  $-1.325$ ,  $p=.001$ ).

For personal growth, participants with a deadline action style have significant lower psychological well-being than those with moderate tendencies toward the early action style (mean difference was  $-1.094$ ,  $p=.007$ ). For sense of purpose in life, participants with a deadline action style have significant lower psychological well-being than those with an early action style, moderate tendencies toward the early action style and moderate tendencies toward the deadline action style. The mean difference was  $-1.987$  ( $p=.001$ ),  $-2.035$  ( $p=.000$ ) and  $-1.221$  ( $p=.007$ ) respectively.

**Table 2**

		SS	DF	MS	F	p	
Relation	Between Group	103.595	4	25.899	3.944**	0.004	5<2, 3
	Within Group	2817.078	429	6.567			
	Total	2920.673	433				
Autonomy	Between Group	90.726	4	22.682	3.229*	0.013	4<1
	Within Group	3013.108	429	7.024			
	Total	3103.834	433				
Acceptance	Between Group	139.135	4	34.784	4.124**	0.003	5<1,2
	Within Group	3617.962	429	8.433			
	Total	3757.097	433				
Mastery	Between Group	421.898	4	105.475	17.322***	0.000	4<1,2,3; 5<1,2,3,4
	Within Group	2612.242	429	6.089			
	Total	3034.141	433				
Growth	Between Group	51.761	4	12.94	3.084*	0.016	5<2
	Within Group	1800.288	429	4.196			
	Total	1852.048	433				
Purpose	Between Group	196.464	4	49.116	6.923***	0.000	5<1,2,4
	Within Group	3043.656	429	7.095			
	Total	3240.12	433				
Total Well-being	Between Group	4362.762	4	1090.691	9.217***	0.000	4<2; 5<1,2,3,4
	Within Group	50763.929	429	118.331			
	Total	55126.691	433				

\*p<.05, \*\* p<.01, p<.001; 1: early action pacing style, 2: moderate tendencies toward the early action style, 3: steady action style, 4: moderate tendencies toward the deadline action style, 5: deadline action style

*Conclusions:* Polychronicity may contribute to individuals’ well-being, especially for positive relations with others and autonomy. One possible explanation for this finding may lie in person-environment fit [10]. When people are asked to do a lot of things efficiently, distributing their time in different parts of lives is a good coping to keep lives balance and satisfy themselves. People exhibiting polychromic behaviors can handle complex interpersonal relationship, connect with others and still feel independent. Another finding of this study is people with deadline action style perceived less psychological well-being than those with steady and early action style. That may be because of the increase of time urgency and time pressure while taking deadline action. When people always catch up with deadlines and do not have sufficient time to accompany friends, family and important others, think about themselves and life meaning deeply, develop talents and potentials, relax and do something interesting. They may lose their sense of control and being a person. A practical implication of this study is on further training intervention. Polychronicity and early action style would be more suitable for keeping individual’s happiness while facing highly time pressure situations.

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## Motivational Profiles of Volunteers: A Person-centered Approach

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**Keywords:** volunteer functions, well-being, basic needs satisfaction, person-centered approach

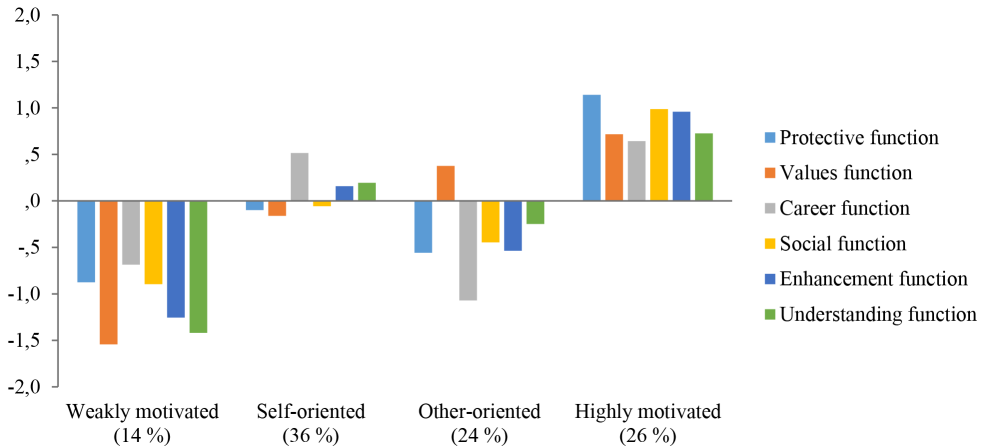
*Background:* People commit themselves to volunteer activities for a variety of reasons and a possible covariation of different motives within an individual can be assumed [1]. Previous studies suggest a distinctive relationship of different motives to volunteer with physical and mental health outcomes, with more altruistic motives leading to higher positive outcomes compared to more egoistic motives [2].

*Aim:* By employing a person-centered approach, the present study examined possible synergistic effects of six functions served by volunteerism: values, understanding, social, career, protective, and enhancement [1]. We expected to find replicable types of motivational profiles within individuals that would show different characteristic patterns of the relationships with well-being indicators.

*Method:* 446 Slovene volunteers filled-in the Volunteer functions inventory (VFI), the Mental health continuum – short form (MHC-SF) and the General needs satisfaction scale (GNSS). A cluster analysis procedure proposed by Asendorpf et al. [3] was used to group participants according to their pattern of the motives to volunteer.

*Results:* A two-step cluster analysis yielded four meaningful clusters. Highly motivated volunteers had high scores on all volunteer functions. Conversely, weakly motivated volunteers had low scores on all motives, with particularly low levels of other-oriented motives (values, understanding). In line with expectations, the remaining two clusters comprised individuals with higher self-oriented and other-oriented motives, respectively. Self-oriented volunteers were most prominently motivated by career, while their level of other motives was average. For other-oriented volunteers the most outstanding reason to volunteer were values, whereas the career function was the lowest in this group. The highly motivated volunteers were characterized by the highest levels of well-being and basic needs satisfaction, and the weakly motivated volunteers by the lowest levels. The largest difference between the two groups was in the levels of social well-being and satisfaction of the need for relatedness. The other-oriented volunteers and the self-oriented volunteers had moderate levels of well-being and basic needs satisfaction and did not differ from each other on the measures used. One exception was the level of autonomy that was significantly higher in the other-oriented group as compared to all other groups.

*Conclusions:* The obtained findings support the assumption of the meaningful constellation of different motives to volunteer within individuals. Four groups of individuals with similar motivational profiles differed significantly with regard to positive mental health outcomes. These findings are in line with theory and previous research [2] and have important implications for the practice of volunteerism, suggesting that volunteer organization should primarily encourage more other-oriented motives in their volunteers.



**Figure 1.** Four motivational types of Slovene volunteers characterized by profiles (mean z-scores) of the six functions served by volunteerism (VFI). Percentages of participants classified in each volunteer type are specified in parenthesis.

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## **Self-Efficacy Mediates Relationships between Personality Traits and Subjective Well-Being (SWB) in Three Periods of Life**

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**Keywords:** self-efficacy, Big-Five, cognitive and affective SWB components

*Background:* SWB is linked to personality traits. McCrae and Costa [1] claim that impact of personality traits on emotions and behavior is mediated by characteristic adaptations (e.g. schema of self) considered by socio-cognitive theories. Beliefs in Self-efficacy reflect own appraisal of capabilities to exercise control over own life, they influence goal choices, level of motivation, resilience in coping with obstacles, stress and depression [2]. There are some data confirming that Self-efficacy beliefs mediate relationships between Big-Five and substance use or depressive symptoms [3].

*Aim:* The present study examined possibility that Self-efficacy beliefs mediate relationships between Big-Five and subjective well-being (SWB) in three periods of life.

*Method:* Adolescents (N=215, 35% men, 13-18yo), emerging adults (N=254, 45% men, 19-24yo), and middle-aged adults (N=252, 54% men, 40-55yo) completed the NEO-FFI, General Self-Efficacy Scale, Satisfaction with Life Scale, Needs Satisfaction ladders, Subjective Happiness Scale and Mood Questionnaire.

*Results:* Three groups differed in all variables, thus hierarchical regression analyses and Sobel test to verify mediations were done separately in each group. Among adolescents Self-efficacy was a mediator in the relationship between neuroticism/extraversion/agreeableness/conscientiousness and all cognitive (life and need satisfaction, happiness) and affective (frequency of Pleasure, Energy and Tension) components of SWB. Self-efficacy mediated relationships between neuroticism/extraversion/openness among emerging adults or between openness/conscientiousness among middle-aged adults and cognitive SWB dimensions.

*Conclusions:* The mediating role of self-efficacy in relationships between Big-Five (four traits) and SWB (six components) was the highest among adolescents. In older groups fewer Big-Five traits predicted lower Self-efficacy variance and Self-efficacy did not predict affective SWB components.

### **Acknowledgments**

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## #NoFilter: An Online Photographic Meaningful-Moments Intervention

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**Keywords:** Meaning; autophotography; online intervention; Instagram

*Background:* The search for and experience of meaning in life is an inherent human need which transcends cultural boundaries. The cultivation of meaning, which focuses on the discovery of what matters most in life and the pursuit of personal aspirations, has shown to have significant effects on lowering psychopathology, and enhancing individual wellbeing in various cross- and multi-cultural contexts. Finding meaning and purpose in life has also shown to increase resilience and perseverance, even in extreme environments such as war-torn states and absolute poverty. Despite the various benefits of meaning, individuals have reported that finding meaning or purpose is 'elusive' and its sources difficult to pin-point. However, sources of meaning is abundant (ranging from positive relationships, through to the beauty of nature) but individuals need opportunities to explore such in a structured manner. Steger et al. (2014) indicates that the use of photographs could be an interesting means through which to capture and explore meaningful moments.

*Aim:* The purpose of this paper is to develop, implement and evaluate an online photographic meaningful-moments intervention to explore sources of meaning through the use of Instagram<sup>®</sup>. A mixed-method pre-experimental intervention design will be employed to evaluate the effectiveness of this intervention.

*Method:* Data will be obtained through (a) autophotography, (b) thematic content analytical themes derived from personal reflections on daily photos and (c) a pre-, post- and post-post assessment with the Meaning in Life Questionnaire, the Satisfaction with Life Scale as well as the Psychological Distress Scale. Specific within-person changes on the subscale will be evaluated and implications of the research described.

*Results:* The results showed promising effects of an online positive psychological autophotography intervention on the development of meaning, and life satisfaction. It also showed to have some effect on the reduction of stress, depression and anxiety.

*Conclusions:* Autophotography as a means to discover meaning proves to be an interesting tool for the enhancement of wellbeing and reducing of psychopathological states.

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## Measuring Optimal Reading experiences: Flow in Fiction Reading

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**Key words:** flow, fiction reading flow scale, presence, reading pleasure, fiction reading

*Background:* Notwithstanding the persistent popularity of fiction reading as a leisure activity, there is still relatively little consensus regarding the mental mechanisms involved in making reading an intrinsically rewarding experience.

*Aim:* The study at hand transferred the concept of flow to the context of fiction reading to provide a new approach to understanding the evolvement of reading pleasure.

*Method:* We developed the Fiction Reading Flow Scale (FRFS) and assessed both flow and more established concepts of narrative engagement by means of two online surveys ( $N = 229$ ;  $N = 373$ ). In survey 1, participants read for 20 minutes in a self-selected novel, and in survey 2, participants read a chapter of the *Odyssey* online, directly before answering the survey.

*Results:* The FRFS showed the expected factorial structure and FRFS scores correlated positively with flow-related constructs such as reading pleasure and motivation, and criteria like text comprehension. Moreover, FRFS scores could be predicted by balance of text challenge and reader skills. On average, FRFS scores were high and well within the range of flow scores on general flow scales reported for activities considered typical for flow. Flow and other reading engagement concepts correlated significantly but were shown to represent distinguishable latent variables.

*Conclusions:* These results indicate that the concept of flow states can be transferred to the context of fiction reading and related to established concepts of narrative engagement. This is significant because flow theory offers a theoretical framework for predicting reading pleasure that can not only enhance our understanding of the pleasurable state underlying positive experiences in fiction reading, but also encourage new research approaches to the field of reading research.

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## Are Humor Styles Predictors of Adolescent Well-being? A Peruvian Study

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**Keywords:** Psychological Well-being, Humor Styles, Adolescents, EPOCH

Adolescence represents a stage of great vulnerability, due to the significant changes and challenges that occur at various levels (Kern, Benson, Steinberg, and Steinberg, 2015; Cosio-Bolaños, Gómez, Lee, Viveros, Luarte-Rocha, Olivares, García-Rubio, and De Arruda, 2015.). In this sense, studies have found that is relevant to consider not only risk factors, but also more positive aspects of functioning (e.g. resilience, positive relations, flow and humor) for the achievement of well-being, as they are related to better outcomes during this specific lifespan period. (Cárcelen & Martínez, 2008; Kern et al., 2015).

*Objective:* The aim of the present study is to determine if specifically the different humor styles (affiliative, agresive, self-enhancing and self-defeating) are important predictors of psychological well-being and its dimensions (Engagement, Optimism, Relationships, Happiness and Perseverance), in Peruvian adolescents.

*Sample:* 1253 Peruvian adolescents from private and public schools ranging between 14 and 18 years old. Instruments: the EPOCH Adolescent Wellness Questionnaire was applied (Kern, Benson, Steinberg, and Steinberg, 2015) and the Humor Styles Questionnaire (HSQ) (Martin, Puhlik- Doris, Larsen, Gray and Weir, 2003). *Method:* Hierarchical Regression Analysis (First step: Socio-demographic variables, Second Step: Humor Styles) and Structural Equations.

*Results and discussion:* Humor styles are important predictors of adolescent well-being and its dimensions, specifically the Self-Enhancing style. The perception of well-being and the evaluation of the circumstances is strongly influenced by the capacity of the teenager of using this sense of humor.

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## Psychological Well-being and Anxiety in Adulthood

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**Keywords:** wellbeing, anxiety, sense of coherence

*Background:* The analysis of psychological concepts of wellbeing showed that hedonistic and eudemonic approaches were based on different theoretical grounds and reflected distinct areas of the inner world of a person [1]. The eudemonic view does not include the emotional factor, whereas hedonistic approaches include it as the main one. As is known, anxiety, which is characterized by feelings of tension and worried thoughts, may destabilize the successful functioning of all spheres of the personality, or performs the mobilizing function.

*Aim:* The purpose of this study was to investigate the interrelation of hedonistic and eudemonic aspects of wellbeing in connection with different aspects of anxiety.

*Method:* The Satisfaction with Life Scale (Diener) and Bradburn's Affect Balance Scale were used for the study of hedonistic aspect of wellbeing. Eudemonic aspect was evaluated with the Scales of Psychological Wellbeing (Ryff) with six dimensions - autonomy, environmental mastery, personal growth, positive relationships, purpose in life, and self-acceptance. Antonovsky's Sense of Coherence Scale was used to measure the sense of self-success in overcoming stressful situations. The levels of anxiety were estimated using the Taylor Manifest Anxiety Scale (TMAS) and the Integrative Test Anxiety (Bizyuk, Wasserman, Iovlev) with scales of emotional discomfort, asthenic and phobic components, anxiety in social contacts, and anxious assessment of the future. The study involved 290 adults (100 men and 190 women) aged from 19 to 44 (the average age is 27.6).

*Results:* Satisfaction with life, positive affect balance and the total scale of psychological wellbeing positively correlate with each other and all of them negatively correlate with integral indicators of anxiety. Almost all criteria of psychological wellbeing are negatively associated with the phobic component of anxiety, with the exception of 'purpose in life' and 'personal growth'. So, a person, who is interested in the development and aims for achieving goals, may have doubts and uncertainties. Among components of Sense of Coherence, 'meaningfulness' has no connection with anxiety, whereas cognitive scales 'comprehensibility' and 'manageability' negatively correlate with anxiety. Also, satisfaction with life, which reflects a holistic cognitive assessment of someone's life, has a negative correlation with anxiety.

*Conclusions:* Cognitive evaluation of oneself in the world and judgments about own live generally are more favorable when anxiety level is low, whereas the value-semantic evaluation of involvement in life and the feeling of ongoing personal development do not depend on the anxiety level in adults.

### **Acknowledgments**

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## **Gratitude at Work: A Self-determination Theory Approach**

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**Keywords:** gratitude, need satisfaction, need frustration, work satisfaction, longitudinal analysis

*Background:* A substantial body of research has found a positive link between gratitude and well-being in life settings. For example, gratitude has been associated with higher life satisfaction as well as better mental health. However, only a few studies have explored gratitude in the workplace.

*Aim:* First, we aimed to test the longitudinal link between gratitude and work satisfaction. Second, we explored the role played by the satisfaction and the frustration of the basic psychological needs for autonomy, competence and relatedness – as postulated by the Self-determination theory – in the mentioned link.

*Method:* We studied a large sample of Chilean workers ( $N = 725$ ), using Structural Equation Modeling and longitudinal cross-lagged designs. This methodology is well suited to investigate prospective directions between variables.

*Results:* We found that gratitude prospectively predicts higher work satisfaction in a three-wave design with four weeks between each wave. Our results also showed that the link between gratitude and work satisfaction is rooted in need satisfaction and need frustration. Importantly, it was also found that gratitude prospectively predicts higher need satisfaction as well as lower need frustration in the workplace.

*Conclusions:* Key implications emerge from our findings for the positive psychology field in organization settings.

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## Exploring the Effects of Social Changes on Personal Values: It Depends on the Society's Cultural Characteristics and Group Membership

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**Keywords:** social changes, individualism vs. collectivism, self-enhancement, openness to change

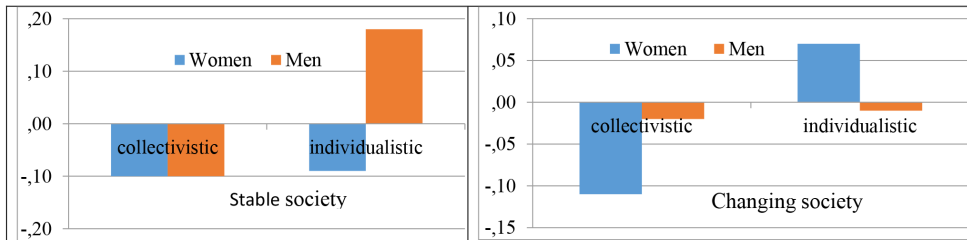
*Background:* In the 21 century, many societies have experienced major changes, economically, politically, socially, and culturally. Such changes may have implications on its members' beliefs, values, choices, and behaviors [1]. However, the consequences of social changes have been found mixed. The evolution in technology (e.g., laptops) may increase support of gender equality [2], whereas social changes in economic activities may inadvertently increase gender inequality in occupations [3]. One possible explanation for the varying consequences of social changes is due to the cultural characteristics in a given society.

*Aim:* Taiwan has been impacted by East and West cultures (e.g., American, Japan, and Chinese) and is undergoing social changes like many industrialized societies. Thus, it serves an ideal setting for priming cultural characteristics and social changes. By priming specific cultural characteristics (collectivism vs. individualism) and social changes (stable vs. changing society), I explore the effects on Schwartz' personal values [4, 5] (self-transcendence, openness to change, self-enhancement, and conservatism).

*Method:* In a sample of 256 Taiwanese adults ( $M_{age} = 22.8$ ,  $SD = 5.1$ ), I manipulated specific cultural characteristics (collectivism vs. individualism) and social changes (stable vs. changing society) and measured their personal values afterwards.

*Results:* When Taiwanese society was portrayed as undergoing changes, participants reported less openness to change than when Taiwanese society was portrayed as stable ( $M = -0.12$  vs.  $M = -0.27$ ,  $p = .007$ ). In addition, a robust participant gender x cultural characteristics x social changes interaction was observed on self-enhancement (see Figure 1). Men reported more self-enhancement when Taiwanese culture was portrayed as individualistic and stable than collectivistic and stable. Conversely, women reported more self-enhancement when Taiwanese culture was portrayed as individualistic and changing than individualistic and changing. There was no manipulation effect on conservatism values.

*Conclusions:* Social changes may have diverging effects on personal values depending on the society's cultural characteristics and the person's group membership (i.e., gender).



**Figure 1.** Men and women's support of self-enhancement values in stable society (the left side) and in changing society (the right side)

**Acknowledgments**

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## Art-of-living - Ways to Enhance Life: Validation and Intervention Studies

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**Keywords:** art-of-living, well-being, training, intervention

*Background:* Art-of-living is a relative new construct, cf. Schmitz (2016). It summarizes all the strategies and attitudes which will enhance well-being. Whereas in positive psychology there exist a lot of strategies to enhance well-being, cf. Sin & Lyubomirsky (2009), most of them are single strategies. What is missing is an integrated and holistic concept, cf. Layous & Lyubomirsky (2012). Following Veenhoven (2003) the differentiation between strategies for well-being (which build art-of-living) and the result of these strategies, namely well-being, is often neglected.

*Aim:* In this presentation the concept of art-of-living is elaborated on and various validation studies are presented. First the relationships between art-of-living, well-being and flourishing are analyzed.

*Method:* Also, objective measures were used for validation like the LIWC for counting positive emotion words in texts, heart-rate variability and skin resistance in the reaction to emotion words. Also peer ratings and states measures of art-of-living using diaries were applied.

Then two studies out of a series of interventions with trainings with respect to art-of-living are presented and it will be analyzed whether well-being is also increasing.

The validation studies using subjective measures are performed with samples of N=1105, N= 643.

Measures were the art-of-living questionnaire with 17 subscales, cf. Schmitz (2016), the SWLS, SHS; AHI and PERMA.

In the training studies (N=164, students from schools, mostly grade 9) there were 3 training groups with different kinds of art-living contents and a control group, measures are the art-of-living questionnaire and the SWLS. The results show increases in art-of-living for experimental groups but not for the control group. In the second training study (N=44) we apply a web-based training in an experimental group (control no training) in art-of-living with similar measures.

*Results:* The results of MANOVA with group and time as independent variables yield a group by time interaction. Further analyses show an enhancement for art-of-living and well-being, which turns out to be stable at the follow-up.

*Conclusions:* Limitations of the studies are discussed. Art-of-living is a promising construct. It comprises components which predict well-being. Art-of-living could be validated using subjective and objective measures. Interventions show that it can be enhanced and as consequence well-being could be enhanced. The results are discussed with regard to further trainings and the relevance of art-of-living concept.

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## **The Effect of a Psycho-training Program Designed to Increase Optimism on Secondary School Students**

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**Keywords:** optimism, secondary school students, Psycho-training Program

The purpose of this study was to investigate the efficiency of a psycho-training program designed to increase optimism levels of the secondary school students. Pre-test post-test control group design was used in the study. “Life Orientation Scale”, which was developed by Scheier and Carver (1987) and adapted by Aydın and Tezer (1991), was applied to the 8th graders of Istanbul Avcılar Cıgangir State School in 2014-2015 academic year. 24 voluntary students with low optimism levels were selected, then, 12 of them were randomly assigned as experimental group, and the other 12 were assigned as control group. For the analysis of the data Mann-Whitney U test was used for inter-group differences and Wilcoxon Signed Rang Test was used for intra-group differences. The results of the study indicate that psycho-training program designed to increase optimism levels has been effective in increasing optimism levels of the participants.

## Towards a Science for Peace

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**Keywords:** peace, post-traumatic growth, forgiveness, hope, wisdom

*Background:* The proposed session presents the Science for Peace Project; a groundbreaking applied research project that attempts to lay down the foundations of a systematic study, based on the recently emerged discipline of positive psychology, to understand the broad psychosocial consequences of violence: its roots, its harms, and the paths of recovery from its damaging effects. It presents a large scale investigation/intervention program that takes place in Colombia, a country transitioning towards peace after a half century civil war.

The Project we aim to present is a first step in the direction of bringing the resources of scientific investigation to bear on one of the major human problems: the use of violence to resolve conflicts. Science and technology have achieved incredible advances in the last hundred years. From spaceships to television, from nuclear weapons to enormous advances in health and in the life-span, it can be said that in the past century humanity has advanced more than in the previous one thousand years. And the pace of progress keeps accelerating. There is one field, however, where there seems to have been no progress whatsoever. Yet it could be argued that this field, where humanity is lagging behind, might be the most important of them all. We are talking about the lack of progress in the mentality of human beings -- what we wish for, how we think, how we organize our lives and the institutions of society. And yet, because of our advances in science and technology, we are now responsible not only for our individual well-being, but for the future of humankind, and the planet in which we live. Unless we apply our minds with the ingenuity that has resulted in spaceships and nuclear warheads to the art of living together in peace, of enjoying life without exhausting the environment in which we live, the future of our race -- and of the beautiful world we have inherited -- is in danger of being obliterated.

*Aim:* The ultimate goal is to create an evidence based intervention protocol for peace-building based on a model that other countries going through similar situations might benefit from in Africa, Asia, Europe (Ireland, France etc.), wherever there is internal conflict, to further their own research and policies.

To achieve this goal, the project pursues a program of separate but complementary research studies in different populations, such as, adolescents, victims, demobilized guerrillas, and the general population, based on new technological means of communication in Colombia. So far, over 2500 survivors of war have been part of our study, in five different locations in the country. We developed a software and mobile application that assesses levels of trauma, post traumatic growth, and positive psychological resources over time that we offer free of cost. We also visited one guerrilla demobilisation camp with 58 participants. As for the education segment of the project, we covered over 80% of Universidad del Sinu's

population, with over 9000 participants including professors, students, and administrative staff. Recently, we published our first national report for the victims of war segment of the program to the Ministry of Health. Currently, we work on writing academic articles on each study, and the second wave data collection strategy.

*Method:* The five studies share a common methodology, although modified appropriately for each study. In each case, we utilize three formats: interview, survey, interventions, and (if appropriate) psychological testing. We are aware that different groups have different needs; although there methodology is common we expect different answers that will allow us to compare and contrast the differences and also find commonalities that can help the development of interventions.

*Results:* On May 3rd of 2018 we published our first national report on negative outcomes of armed conflict with survivors of war (i.e. PTSD, psychological distress), as well as positive psychological processes/aspects (i.e. post-traumatic growth, forgiveness, hope, positive emotion, engagement, relationships, meaning, accomplishment). Data were collected from more than 2,500 war survivors from the department of Córdoba (Montería, Montelíbano and Tierralta, N = 986) and a natural disaster in Colombia (Mocoa, N = 1651) of whom 69% were also victims of war. Approximately 29% of survivors of war and 42% of survivors of natural disasters were detected as positive for post-traumatic stress disorder (PTSD). In addition to PTSD symptoms, we assess psychological distress / suffering in general. One third of the sample of victims of war (31.23%) and half of the sample of victims of the avalanche (50.49%) reported levels of psychological distress / suffering from moderate to severe. Among the survivors of trauma exposed to the conflict in the department of Córdoba (Montería, Montelíbano and Tierralta), between 25.51% and 31.09% of the people presented positive results for PTSD. There was no evidence to suggest a difference in prevalence between locations. The greater post-traumatic stress was associated with an uncontrollable more intrusive rumination and also seemed to provoke more attempts to control negative thinking. The traits of forgiveness kept the post-traumatic stress lower. Religious coping was one of the ways in which people tried to control their psychological problems, but people seemed to use both positive and negative methods in their attempts to reduce stress. Negative religious coping was associated with greater anguish. The differences in the traits of hope were not necessarily related to post-traumatic stress. Increased post-traumatic growth was associated with active attempts to process the trauma sequelae (deliberate rumination). The tendency to be a person with greater hope was the strongest predictor of post-traumatic growth among survivors of the war. To understand how to alleviate the symptoms of PTSD and other psychiatric problems, as well as to understand how to facilitate post-traumatic growth, we examined potential targets for clinical intervention among survivors of war who obtained a positive diagnosis of PTSD (ie, individuals whose PCL score was greater or equal to the threshold at which civilians are typically referred for clinical follow-up). We separate the models to examine cognitive styles, virtue, religious coping, and aspects of human flourishing, which we hypothesize are associated with depression / anxiety, post-traumatic stress and post-traumatic growth.

Among the survivors of the Mocoa avalanche, women, middle-aged adults, victims of armed conflict, the unemployed, people with mental illness or previous physical disabilities, and those who received government assistance before the disaster were more likely to screen

positive for PTSD. Cognitive processing associated with post-traumatic stress disorder or post-traumatic growth increase were those with intrusive reflections and those that actively tried to control those reflections (deliberate rumination). More post-traumatic stress was associated with lower levels of forgiveness and hope, but higher levels of positive and negative religious coping. Higher post-traumatic growth, on the other hand, was associated with higher levels of hope and the use of positive religious coping. Flourishing aspects were associated with less post-traumatic stress and more post-traumatic growth. Higher post-traumatic stress was associated with lower levels of positive emotion, engagement, relationships and higher levels of meaning and achievement. Greater post-traumatic growth was associated with lower levels of positive emotion, but with higher levels of meaning and achievement.

*Conclusions:* The results of these pilot studies with survivors of war indicate that people in Colombia are highly stressed and frequently report symptoms of PTSD. The replication of the national comorbidity survey (NCS-R) conducted in the early 2000s on a representative national sample of Americans showed a lifetime prevalence of post-traumatic stress disorder of 6.8% among American adults. Compare this with 20-25% of Colombian adults who have been screened for PTSD only in the last few months in these samples. The prevalence of PTSD in Colombian samples is much closer to that reported by US military veterans, such as the lifetime prevalence of PTSD in Vietnam veterans, which ranges from 26.9% to 30.9% in the National Readjustment Survey. Veterans of Vietnam. It is likely that these PTSD rates have public health costs in terms of employee absenteeism, increased risk of cardiovascular events and other health problems.

Our future work will focus on the impact of PTSD on public health (eg, health care costs, absenteeism and work disability, etc.) as well as the potential to develop and disseminate psychological services to alleviate post-traumatic stress and facilitate post-traumatic growth among Colombians using resources unique to culture and individuals.

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# POSTER PRESENTATIONS

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## The Effect of Daily Downtime on Productivity and Happiness

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**Keywords:** downtime, productivity, happiness, work performance

*Background:* As defined by physics, Energy is the capacity to work. But when it comes to human beings it has four different wellsprings: the body, mind, emotions and spirit. Tony Schwartz and Catherine McCarthy's suggested that focusing on how to cultivate more energy, instead of obsessing over time, will bring increase to people working performance.[1] We are also living in the new era of communication, which we never get disconnected from our family, friends, colleagues and the world around us. The downside of this constant connection is overloading our interactions and missing our 'own time' moments. This would keep us always busy and in continues temptation of 'finishing something'; an endless race to become 'successoholic'. Manfred F.R. Kets de Vries believes that we are at risk of becoming victims of informational overload. Being busy can be a very effective defense mechanism for warding off disturbing thoughts and feelings. [2]

*Aim:* This paper examines the relationship between the downtime (doing nothing time), happiness and productivity. For this thesis, it was hypothesized that people who have more daily downtime, experience more subjective-wellbeing and feel being more productive and have better work performance.

*Method:* The research employed a survey questionnaire applied to a sample of 150 Canadian, living at GTA. The satisfaction with the life scale (SWL) was measured using the 4-items scale to show global cognitive judgment of one's life satisfaction. The daily 'doing nothing' time and productivity level were self –explanation measures. *Results:* The study result shows significant positive correlation between downtime, happiness and daily work performance. Also, the result shows negative correlation between the downtime and work performance while the length of daily downtime exceeds more than 30 minutes.

*Conclusions:* Having routine daily downtime such as walking, napping and meditating could replenish physical, mental and emotional energy [3] and could increase the employees' self-awareness, self-management and creativity at work. [2] Also, people with more daily downtime routines claimed higher level of life-satisfaction, happiness and productivity while the downtime is less than 30 minutes per day.

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## Happiness and Satisfaction With Life Among Individuals With Mobility Disability – Does Self-Efficacy Matter?

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**Keywords:** self-efficacy, happiness, satisfaction with life, disability

*Background:* Psychological well-being is a superordinate construct that subsumes other constructs such as satisfaction with life and happiness. Having a mobility disability might negatively affect individual's subjective outcomes of psychological well-being, it becomes important to identify his internal strengths and resources. Self-efficacy is one of key resources in coping with the challenges and demands presented by a chronic condition or disability.

*Aim:* This study aimed to investigate the importance of general self-efficacy on happiness and satisfaction with life, as perceived by mobility impaired individuals.

*Method:* The study sample was consisted of 223 individuals with mobility disabilities (81 men and 142 women), aged between 18 and 66. Self-efficacy was assessed using General Self-Efficacy scale [1]. Satisfaction with life was measured using Satisfaction With Life Scale [2] and happiness was assessed with Subjective Happiness Scale [3].

*Results:* The results revealed that male respondents reported having higher general self-efficacy than female but there were no significant gender differences in satisfaction with life and happiness. Younger individuals also reported higher scores of general self-efficacy, satisfaction with life and happiness. Regardless of gender or age, participants with higher general self-efficacy reported significantly higher scores of subjective happiness and satisfaction with life compared to participants with lower self-efficacy.

*Conclusions:* These results confirm general self-efficacy being very important to individual's psychological well-being – it is significantly related to subjective happiness and satisfaction with life for people with mobility disabilities. Self-efficacy enhancing interventions and activities might improve the outcomes of psychological well-being for mobility impaired individuals during and post-rehabilitation period.

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## Age and Gender Differences in Self-Compassion in a Japanese Adult Sample

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**Keywords:** self-compassion, age, gender, Japan

*Background:* Self-compassion refers to a compassionate attitude toward self when facing one's failures, weaknesses, and disappointments. Research suggests that self-compassion differs by age and gender [1], but only few studies have been conducted with older adults.

*Aim:* The present study is to explore the age and gender differences in self-compassion in Japanese adults, comparing middle-aged individuals and older ones.

*Method:* An Internet survey concerning "happiness and life" was conducted by Cross Marketing Co., Japan. Total number of participants was 2000 adults (1000 males and 1000 females), and their mean age and SD were 49.8 and 17.01, respectively (49.99 and 16.98 for males, 49.73 and 17.04 for females). Questionnaire consisted of demographic questions and several scales, including the Self-Compassion Scale short form (SCS) [2] and Subjective Happiness Scale (SHS) [3]. The analyses were conducted using SPSS and AMOS ver. 24. The IRB of the third author's institution approved the study.

*Results:* Table 1 presents the means and standard deviations of SCS for males and females of six age groups. The mean SCS score increased with age among those above the 50s. Two-way ANOVA showed that there was a significant difference between age groups ( $F(5, 1988) = 42.81, p < .001$ ), with no gender effect or interaction. Confirmatory factor analyses were conducted to examine factorial invariance among age groups. The results showed that only factor loadings were equivalent across age groups ( $\Delta\chi^2(6) = 4.33, n.s.$ ).

*Conclusions:* Our findings suggest that the SCS is a valid and reliable measure to assess self-compassion among adults across ages.

Table 1. Means and standard deviations of the self-compassion scale (SCS) by gender and age groups.

	20s	30s	40s	50s	60s	70s and over
Males	34.77 (5.68)	35.28 (6.10)	36.43 (6.06)	36.61 (5.37)	38.91 (5.40)	39.36 (5.26)
Females	34.23 (7.12)	35.45 (6.97)	34.81 (7.50)	36.24 (6.49)	39.81 (5.74)	40.10 (5.62)

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## Contribution of “Family” to Japanese People’s Concept of Happiness: Discourse Analysis of Texts about Happiness

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**Keywords:** happiness, discourse analysis, Japanese, family

*Background:* The concept of happiness varies across cultures. Uchida, Norasakkunkit, & Kitayama (2004) found that East Asian culture tends to connect happiness with interpersonal relationships, while North American culture tends to connect it with personal achievement [1]. It is important to focus on “family” when examining happiness in Japan because family relationships can affect happiness, especially life satisfaction [2]. However, it is uncertain how “family” contributes to Japanese people’s concept of happiness.

*Aim:* This study examines how Japanese people refer to “family” when explaining their sources of happiness and how “family” contributes to their concept of happiness.

*Method:* Responses of 500 participants (mean age = 42.51, SD = 7.64) were collected through an online questionnaire survey. They were asked two questions: (a) “What is happiness for you?” and (b) “Why do you think this is happiness?” The authors collated the answers referring to “family” from all the responses, and then classified these answers into several categories. Finally, the text in each of these categories was subjected to discourse analysis.

*Results and Conclusions:* The results show that 117 out of 500 participants referred to “family” as an essential component of their happiness. This implies that for many Japanese people happiness depends upon their family life.

An analysis of the reasons why participants felt family was important revealed nine categories, which were identified as follows: (1) “Family is just the reason,” (2) “Family is precious,” (3) “Family makes me satisfied,” (4) “Family makes me feel a sense of identity,” (5) “Family gives me comfort,” (6) “Family is where I belong,” (7) “Family is a must,” (8) “There is nothing to worry about with family,” and (9) “It is common to be with family.”

We discuss how these categories reflect three interconnected discourses about the family: (a) “Family makes my happiness,” (b) “Family is worth unconditionally,” and (c) “Family is the first condition of my happiness.” These findings suggest the dominant discourse about the family in Japan is that personal happiness should not be separated from that of one’s own family. Future studies should focus on how Japanese people understand the relation between personal happiness and their family’s happiness using in-depth interviews.

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## Post-traumatic Cognitions and Well-being in Terrorism Victims: The Role of Trauma Exposure

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**Keywords:** well-being, positive health, Post-traumatic Cognitions, terrorism, Indirect-Direct Exposure

*Background:* The effect of indirect (versus direct) exposure to a traumatic event on the positive health of terrorist attack victims has received considerable attention in the literature. However, more research is required to examine whether the symptoms and underlying processes caused by both types of exposure are equivalent. Our main hypothesis is that well-being plays a different role depending on indirect vs. direct trauma exposure.

*Methods:* In this cross-sectional study, eighty direct victims of 11-M terrorist attacks (people who were traveling in trains where bombs were placed) and two-hundred indirect victims (individuals highly exposed to the 11-M terrorist attacks through communications media) voluntarily participated without compensation. To test our hypothesis regarding the mediating role of indirect exposure, we conducted a biased corrected bootstrapping procedure. To test our hypothesis regarding the moderating role of direct exposure, data were subjected to a hierarchical regression analysis.

*Results:* As predicted, for indirect trauma exposure, well-being mediated the relationship between posttraumatic dysfunctional cognitions and trauma symptoms. However, for direct trauma exposure, well-being moderated the relationship between posttraumatic dysfunctional cognitions and trauma symptoms.

*Conclusions:* The results of our study indicate that the different role of well-being found between indirect (causal factor) and direct exposure (protective factor) should be taken into consideration in interventions designed to improve victims' health.

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## Personality, Emotional Intelligence and Life Satisfaction

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**Keywords:** life satisfaction, personality, Big Five factors, emotional intelligence

*Background:* Previous research has found small but reliable relationships between emotional intelligence and some components of well-being. The strength of these relationships varies as a function of the way of emotional intelligence is measured, and it is still unclear whether emotional intelligence can predict well-being after controlling for the Big Five factors, which are also reliable predictors of subjective well-being.

*Aim:* This study examined the relationship between the Big Five personality traits, trait and ability-based emotional intelligence and life satisfaction.

*Method:* In our cross-sectional study 421 persons (166 man and 255 woman) took part. The participants completed the Assessing Emotions Scale, the Situational Test of Emotion Management, the Ekman 60 Faces Scale, the Big Five Inventory, and the Satisfaction with Life Scale.

*Results:* We found that, four Big Five traits (extraversion, agreeableness, conscientiousness, openness) were positively and neuroticism was negatively correlated with both life satisfaction ( $r = 0,20-0,33$ ,  $p < 0,01$ ) and trait-emotional intelligence ( $r = 0,21-0,55$ ,  $p < 0,01$ ). According to the results of hierarchical regression extraversion, neuroticism and trait-emotional intelligence had a unique significant effect on life satisfaction. The trait-emotional intelligence can account for a significant additional variance in SWLS scores after controlling for the Big Five factors (Adjusted  $R^2 = 0,231$ ;  $F(7, 413) = 21, 016$ ;  $p < 0,001$ ). In contrast, the ability-EI scales were independent from both personality traits and life satisfaction.

*Conclusions:* Our findings are consistent with previous studies confirming the Big Five factors play important role in the life satisfaction, and demonstrated that trait-emotional intelligence is a fundamental in affecting one's subjective well-being. This study also confirms that trait-emotional intelligence and ability-emotional intelligence are independent constructs.

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## Optimism as a Protective Factor Against Type 2 Diabetes Among Older Adults

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**Keywords:** diabetes, optimism, protective factor, health

*Background:* Type 2 Diabetes (T2D), characterised as insulin resistance, is one of the most burdensome diseases in individuals and societies worldwide. It is associated with a variety of serious health issues and mortality, and substantial healthcare cost. It is estimated that by 2030, 552 million people in the world will be affected by this disease [1]. It has been known that a significant number of cases of T2D are due to modifiable biological and behavioral risk factors such as hypertension, unhealthy diet, smoking, and physical inactivity [2]. In more recent years, there has also been increasing interest in exploring the role of psychosocial risk and psychosocial protective factors—such as stress, stress resilience, and coping—for the development and management of T2D [3]. While there exists studies on the psychosocial risk factors for T2D, studies on the possible protective role of positive psychological factors are limited. Even with existing efforts, the incidence of diabetes is high and increasing. Thus, there are needs for continuing efforts to explore additional protective factors to reduce the incidence of T2D.

*Aim:* This study focuses in a positive psychological factor—i.e. optimism—that has been shown to protect against many illnesses such as stroke, heart attack, cancer, and mortality [4]—and explores its relationship with the incidence of T2D among older adults.

*Method:* This study utilizes longitudinal data from the Health and Retirement study (HRS). It is a nationally representative panel study that surveys over 22,000 US adults over the age of 50 every 2 years. The present study included sample of 11007 (M = 68 years; SD = 11) from HRS who did not have T2D at baseline (2006). T2D incidence was measured in 2012 with a 6-year follow-up. Optimism scores measured at baseline utilized a self-report survey called the Life Orientation Test–Revised (LOT-R) (Scheier, Carver, & Bridges, 1994) [5].

Binominal regression analyses were conducted to evaluate the effects of baseline level of optimism on T2D incidence over 6 years. Multiple sets of covariates at the baseline are taken into account, including demographic factors (e.g. age, sex, and race), health factors (e.g. self-rated health and BMI), health behaviors (e.g. smoking, alcohol, and exercise), and psychological factors (e.g. anxiety, depression, pessimism).

*Results:* Over the 6-year study period, a total of 9.9% (1091) of our sample developed T2D. Results showed that after controlling for multiple covariates which are known to be related to health outcomes, the level of an individual's optimism significantly predicted the incidence of T2D. People with higher baseline levels of optimism had a significantly lower risk of diabetes incidence over 6-years.



*Conclusions:* These results suggested that psychological well-being constructs such as optimism could be protective factors against the incidence of T2D among older adults. The current finding could have significant implications for future public health efforts to prevent T2D.

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## Russian Students' Conceptualization of Life Calling: A Qualitative Analysis

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**Keywords:** calling, vocation, career development, qualitative document analysis

*Background:* Life calling is a rapidly developing research area in positive psychology, vocational psychology, as well as management and counseling. The phenomenon of calling as an important component of a life worth living has been studied chiefly among Western populations; in recent years several studies on calling also appeared in the East. For centuries the idea of calling has been permeating Russian philosophy, literature and people's everyday life. However there were no research, to our knowledge, which empirically explored the concept of calling in Russia.

*Aim:* The aim of the present study was revealing college students' perceptions of calling in Russia, the country whose culture is often said to combine the traits of both Western and Eastern cultures, and comparing the results with similar studies on American (Hunter, Dik, Banning, 2010) and Chinese students (Zhang et al., 2015).

*Method:* Two large top Russian universities were selected, one of which specialized in economics and social sciences, and the other in engineering and technology. Data has been collected via online survey from 104 students: 51 students of National Research University Higher School of Economics and 53 students of National Research Nuclear University MEPhI. The survey contained both closed and open-ended questions aimed to explore how students defined calling, and what they did to discern and pursue it. The method of emergent qualitative document analysis has been selected for the analysis of the answers to open-ended questions, due to its suitability for exploration of phenomena with limited literature coverage (Altheide, 2008).

*Results:* 83.2% of respondents indicated that calling was a relevant idea for them. Analysis of the answers to open-ended questions produced the following *Results:* The definition of calling was reflected in six themes: intrinsic motivation, success, "more than a job", dedication, ability and energy influx. Positive affect, success, purpose, and interest were the most prominent indicators of calling, mentioned by more than a quarter of the respondents. Only 10% of the respondents identified a specific area or profession, which they believed to be their calling. The majority of the respondents described their callings in abstract terms (to provide benefit, to make the world a better place, to be happy), or indicated, that they were searching for it. Search for calling included observable activity aimed at exploration of different areas, as well as internal activity comprised of self-reflection and self-development.

*Conclusions:* The concept of calling in our sample does not diverge significantly from American and Chinese samples. They also link calling with enjoyment, a sense of purpose and benefiting others. Russian students also share the idea of personal growth and employing their talents with their American (but not Chinese) peers. Unlike American and Chinese students, Russians seem to emphasize successful performance as an indicator of having found one's calling. This finding needs further investigation.

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## Personal Strengths Development as the “learning to be” Competence in a University Foreign Language Class

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**Keywords:** personal strengths, learning to be, higher education, foreign language teaching

*Background:* In the frame of an on-going doctoral project, we’ve applied the strengths classification and the positive approach to educational interventions to teaching the “learning to be” life competence in a foreign language class. Although this competence is part of the educational model for the XXI century since the end of last century [1] and is a learning objective in any foreign class since early this century [2], there seems to be no clear theoretical or didactical framework for its teaching and evaluation. Not only do the official documents remain abstract on this topic, but some of the research reviewed does not offer more clarity either. For example, Barahona, Sánchez y Urchaga [3] define the “learning to be” as an “attitudinal personality dimension” (p. 247) to just a few lines later redefine it as the “personal and social competencies such as the disposition to be present, think critically and autonomously and possess cooperative and collaborative skills” (*ibidem*). While the thinking is rather part of the “learning to know”, and the cooperation belongs to the “learning to live together”, the resting “presence” is hardly a competence at all. A clarification on the subject is necessary.

*Aim:* The purpose of this on-going research has been to evaluate the perception and effect of a positive intervention based on strengths coaching as the “learning to be” in a language class.

*Method:* Our *context* was a rural Technological University in Mexico. The *participants* were 20 second year students enrolled in the MEXPROTEC scholarship programme, allowing them to compete for one of 200 full year scholarships in France. The French B1 preparation class was the scenario of 6 training sessions on personal strengths (as defined by Peterson & Seligman [4]). In a mixed *design*, a series of interviews and tests was applied prior and after the intervention, and the selection results were included in the analysis.

*Results:* The approximation to the first results (available in full by the time of this conference) shows that the intervention was very well received by the participants and effective.

*Conclusions:* We argue that the personal strengths framework is highly suitable for the “learning to be” competence development, as it helps to clearly distinguish the “learning to be” from other “learnings”, it’s friendly, highly personalizable and is of high value for life, just as intended by the international organisms proclaiming this competence as an educational pillar.

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## Emotional Intelligence in the Workplace: Exploring its Effects on Organizational Commitment

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**Keywords:** emotional intelligence, seniority in the company, personality traits, and organizational commitment

In this study, we examined the relationships between the Emotional Intelligence (EI) dimensions and classic variables considered in research, such as demographic variables (seniority in the company) and personality traits for organizational commitment. Also, this study sought to determine whether EI accounted for a significant portion of the variance beyond that of classic variables in the study of organizational commitment outcomes in a sample of 272 employed subjects. As expected, results indicated that EI and personality traits were found to be significant and positively associated to organizational commitment (Table 1). We conducted hierarchical regression analyses to examine and evaluate the separate contribution of seniority in the company, personality traits and EI for the prediction of organizational commitment. Additionally, results of regression analysis indicated that EI explain a significant amount of the variance of organizational commitment after controlling for seniority in the company and personality dimensions (Table 2). Finally, theoretical and practical implications of these constructs and their relationship with organizational commitment in employed people are discussed.

### Illustrations

**Table 1:** Means, standard deviations, reliabilities and correlations between different measures

	1	2	3	4	5	6	7	8
1. Seniority in the company	-							
2. Extraversion	-.09	-						
3. Agreeableness	-.04	.46**	-					
4. Conscientiousness	.08	.27**	.32**	-				
5. Emotional Stability	.01	.26**	.35**	.39**	-			
6. Intellect	-.09	.49**	.38**	.48**	.23**	-		
7. Emotional Intelligence	-.07	.31**	.34**	.24**	.26**	.32**	-	
8. Organizational Commitment	.06	.21**	.23**	.19**	.21**	.16**	.41**	-
<i>M</i>	143.91	6.92	7.52	7.61	6.44	7.23	5.35	4.13
<i>SD</i>	134.10	1.23	1.00	1.03	1.33	1.02	.77	.66
$\alpha$	-	.77	.77	.80	.83	.80	.89	.82

Note: \*\*  $p \leq .01$ , \*  $p \leq .05$

**Table 2:** Results of hierarchical regression analyses of EI on organizational commitment controlling for seniority in the company and personality traits.

Predictors	Organizational Commitment			
	$\beta$	R <sup>2</sup>	$\Delta R^2$	F
<b>Step 1: Demographic variables</b>		.00	-	.93
Seniority in the company	.08			
<b>Step 2: Traits of personality</b>		.09	.09	4.42***
Extraversion	.07			
Agreeableness	.05			
Conscientiousness	.05			
Emotional Stability	.07			
Intellect	-.05			
<b>Step 3: Emotional Intelligence (EI)</b>		.20	.11	9.17***
Global score on EI	.36***			

Note: Betas from the final step of the regression; \*\*\*  $p \leq .001$ , \*\*  $p \leq .01$ , \*  $p \leq .05$

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## National and European Identity, Level of Optimism and the Decision to Study Abroad in Romanian High School and College Students

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**Keywords:** European identity, national identity, attitudes, push-pull factors

European Union was founded based on several “beliefs”, including the idea of a new sense of the self (Chrysochoou, 2000) to deepen the unity between the countries and to establish a citizenship common to nationals of the countries. The construction of European Union is based on the next generations’ attitudes and beliefs, the students of our days are the future professionals and they play a major role in the development of the European Union.

The aim of the present study is to analyze the relation between the European and national (Romanian, in the case of the present study) identity and the level of optimism of the students participating in this research; also, we focussed on the difference between high school and college students regarding the push-pull factors when considering to study/to work abroad, taking into account the level of optimism.

An instrument was developed to measure the variables of interest, comprising demographical data items, items to identify the push-pull factors for studying/working abroad, adapted from different studies (Bodycott, 2009; Doyle, 2010; Smith, 2016). The emotional aspect of attitudes concerning European and national membership were investigated using Semantic Selection Test (D’Escury, 2008; Szabó, 2010) and the cognitive and behavioural components of these attitudes were explored by a questionnaire focusing on the perceived consequences of their country’s European integration. The optimism was measured using the subscale The Questionnaire for the Evaluation of Optimism, from the Computerized Platform of Psychological Evaluation ([www.cognitrom.ro](http://www.cognitrom.ro)). The whole questionnaire was delivered to 200 participants, either in Google form, or in paper-pencil form, after giving the informed consent.

The results indicate a strong relation between national and European identity and the benefits of the Romanian integration in the EU on one side, and with the level of optimism, on the other side. We found different patterns of association between European and national identity, ranging from strong feelings of belonging to one or both categories to a low identification and negative attitude toward one or both membership categories.

In conclusion, the results showed the complexity of the national and European identity, as seen by the students, and some relevant impacting factors on their decision to study/work abroad. The results are a relevant starting point for future directions of research, considering other relevant factors, like personality traits, previous life experiences abroad, level of education of the family members, etc.

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## Participation in Alternative Food Networks and Well-being

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**Keywords:** Alternative Food Networks, wellbeing, participation, consumption

*Background:* In the recent years, food-sources seeking and consumptive behavior associated with the personal choice of optimal nutrition quality of the consumers are widely studied. Steps toward a healthy diet can not only relieve health anxiety but could be determining factors of individual health promotion or subjective wellbeing [1].

*Aim:* Our research focuses on the interpretation of wellbeing in the context of alternative food networks, as local food movement, and within the well-defined AMAP (Associations pour le maintien d'une Agriculture paysanne) community farming. In this kind of Community Supported Agriculture, typically small-scale farms provide week-to-week freshly harvested organic vegetables in a weather-influenced amount for members through a specified period of time. Thus, understanding the functions and motivational background of membership based on wellbeing factors and their relevant patterns can be particularly valuable.

*Method:* During a national fieldwork in 2017, we conducted semi-structured deep interviews and applied a global wellbeing scale [2] for members (N = 35) of AMAPs. The interview-transcripts had been evaluated via qualitative approach content analysis.

*Results:* Our results show that the level of wellbeing of people who are engaged in AMAP is above the Hungarian average (compared to the results of the Hungarian Happiness Research 2016), and social and spiritual wellbeing components are particularly correlated with membership.

*Conclusions:* It seems that there is a complex system of aspects behind the choice of alternative consumer sources, and interpreting it in the context of wellbeing concept play an important role. In further research, it seems worth to examine the role of the environment of different Alternative Food Networks, the motivational background of the members, and the individual characteristics that maintain physical and mental health.

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## Which VIA Character Strengths are Perceived to be Morally Valuable, Desirable, and Emotionally Elevating?

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**Keywords:** character strengths, virtue, moral elevation, moral emotions

*Background:* The VIA classification [1] conceptualises character strengths as measurable individual differences that are universally morally valued, elevating to observers, and conducive to individual well-being. While the 24 traits described in the VIA and operationalised in the VIA-IS have been shown by extensive research to be positively associated with individual well-being, the perceived moral value and elevating effect of strengths, albeit prioritised by the VIA definition, received far less empirical attention. One cross-cultural study [2] demonstrated high levels of endorsement of VIA strengths among Inughuit, Massai and US students, with limitations in the precision of measures due to the samples' unequal literacy.

*Aim:* To expand on the evidence for the universal endorsement of VIA strengths, we gathered ratings of the moral value and elevating effect of these traits.

*Method:* 443 predominantly university-educated (77.7%) participants from 46 countries were randomly shown four third-person descriptions of traits based verbatim on VIA-IS subscales, and rated the value and desirability of the trait described (12 items), how seeing it in someone might make them feel (12 items), whether they identified with the trait, and how well it fit definitional criteria of strengths (4 items), on 5-point scales. Control variables included sociodemographic factors and familiarity with the VIA. Since the means and variance of ratings as such were of interest, this poster focuses on specific descriptive *Results:*

*Results:* Means indicated that participants, on average, "somewhat agreed" ( $M \geq 3.5$ ) 17 out of 24 VIA strengths to be valuable and elevating, with significant differences between strengths. Traits participants saw in themselves more (*learning, leadership*) were rated significantly higher for elevation and value than those less endorsed (*self-control, teamwork*). Other control variables had little or no effect on ratings, suggesting few inter- or intracultural differences. *Spirituality* was least identified with and rated least valuable. The descriptions of seven traits did not, on average, elicit elevation, and the definitions of five strengths did not receive universal agreement ( $M < 3.5$ , both including *teamwork, self-control, prudence, and judgment*). Degrees of variance indicated comparatively more diverging opinions about some traits (*teamwork, fairness, forgiveness*) than others (*appreciation of beauty, social intelligence*).

*Conclusions:* This study provides evidence for the cross-cultural endorsement of VIA strengths, but casts doubt on just how universally accepted and consensual the definitions of such traits as *teamwork*, *prudence* and *self-control* in the VIA classification and related measures actually are. Ratings by experts, laypeople, and participants from diverse cultural backgrounds may inform revisions of the VIA. More systematic cross-cultural research may further investigate the proposed universality of conceptions of virtue and good character.

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## Dealing with Stress and Learning how to Flourish: A Preventative Course for the General Public, Funded by German Health Insurers

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**Keywords:** flourishing; wellbeing; positive psychology intervention; depression, healthcare

*Background:* In Germany, health insurance is mandatory for everyone and state health insurers care for 90% of the population. One of the largest health insurers has been rolling out the here presented course since 2017. This is the first wide-scaled implementation of the concepts of Positive Psychology in German public healthcare. [1].

*Aim:* A longitudinal study aimed to evaluate how a relatively short on-site course can help a non-clinical population to increase their level of psychological functioning. Effects of the course on participants' well-being were compared to a control group.

*Method:* In two quasi-experimental studies (N1 = 77, N2 = 42), participants' well-being was assessed by measuring happiness, flourishing, and life satisfaction, and ill-being by measures of depressive symptoms and risk for burnout. RM MANOVAS were conducted per protocol and with intent to treat. Missing values were handled both by listwise deletion (LD) and multiple imputation (MI).

*Results:* In study 1, participants' happiness, flourishing, and life satisfaction increased significantly compared to the control group, while their depressive symptoms and burnout decreased at post-test and two months later. Study 2, conducted with the staff of a nursing home, showed significant effects group\*time only for depression and burnout.

*Conclusions:* Results indicate that a relatively short course might help a non-clinical population to increase their level of well-being and decrease depressive symptoms. However, baseline measures indicated that more than one third of the treatment group showed symptoms of mild to severe depression which echoes current rates of prevalence worldwide. After participation, their average level of depression decreased to a minimum score. According to the WHO, the risk for depression might be the second leading cause of disability in 2020 (Lyubomirsky et al., 2011). Therapeutic treatment is obtainable by less than 30 percent of people even in affluent nations (Layous et al., 2011). A course like this, funded by state healthcare, can provide an accessible way for the general public to cope with stress and flourish.

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## Attentive Aging: A Second-Wave Approach to Life in Old Age

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**Keywords:** attentive aging, hostile-world scenario

*Background:* The concept of attentive aging is introduced as a new perspective on the aging process. It underlines *the imperative need to be vigilant to changes and threats* in old age, in order to activate strategies of survival, coping and growth. This state of monitoring is inspired by the theoretical model of the hostile-world scenario (HWS), that focuses on the image that each individual has about actual or potential threats to one's physical and mental integrity [1-4].

Attentive aging is activated via changes in world scenarios and has three aspects: The cognitive aspect relates to being in a mindful state towards oneself in order to perceive significant changes in one's life conditions, risks and mental states. The emotional aspect relates to the capacity of regulating emotions aroused in changing, and particularly threatening, conditions [5]. The behavioral aspect relates to assimilative and accommodating behaviors whereby individuals act in order to withstand troubling experiences [6].

A key feature of attentive aging is its non-judgmental nature. Aging is viewed as a process that is not dichotomized into either positive or negative, successful or unsuccessful. It underlines the subjective screening that is activated in old age in order to identify the continuous, sometimes critical, changes of life conditions in this period of time.

*Aim:* To theoretically present the new concept of attentive aging while drawing both on the HWS framework as well as the current mindfulness perspectives as both applied to old age.

*Method:* The presentation relies on samples of bereaved and disabled aging individuals, where participants completed questionnaires assessing physical and mental health as well as the HWS questionnaire.

*Results:* The presence of attentive aging will be illustrated by examples showing how attention to various aspects of HWS and life conditions are related to the individual's well-being.

*Conclusions:* By proposing the concept of attentive aging we aim to expand the view on the aging process as a dialectical, continuous and multidimensional one, thus enhancing the understanding of challenges and adversities experienced in old age.

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## Quality of Life in Structure of Personal Potential in Rural Young People of the North of Siberia

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**Keywords:** quality of life, alcohol dependence syndrome, rural young people, personal potential, self-determination

Nowadays, one of the acute social problems is addictive behavior of young people. Especially this concerns rural areas where the number of patients with alcoholism increases. We hypothesize that deficiencies of personal potential can determine impossibility of self-fulfillment, thereby reducing quality of life, resulting in emotional pressure which finds a way out in alcohol realizations. Personal potential is considered as nonspecific system of the stable, but able to be developed purposefully and changed, individual-psychological characteristics associated with success of activity in the situation of uncertainty, achievement and pressure, relevant to problems of the choice and implementation of activity in the changing conditions (D.A. Leontyev).

Objective: to reveal general and individual-specific patterns in interrelationship of indicators of quality of life and components of personal potential in representatives of youth during formation of alcohol dependence. Sample: 70 persons with alcohol dependence syndrome and 70 persons without alcohol dependence syndrome, aged from 20 to 35 years, male - 90, female - 50. Methodology - the concept of personal potential of the person by D.A. Leontyev. Techniques: "Satisfaction with Life Scale" (E. Diener), "Quality of Life Enjoyment and Satisfaction" (M. Ritsner et al), "Activity Self-Organization" (E.Yu. Mandrikova), "Hardiness Scale" (S. Maddi), "Reflection" (D.A. Leontyev), "World Assumptions Scale" (R. Janoff-Bulman); "Self-Determination Scale" (K. Sheldon). It is revealed that indicators of quality of life are presented variously in factor structure of personal potential in empirical groups. In group with dependence syndrome, high interdependence of subjective evaluation of quality of various spheres of life and absence of association between evaluation of quality of life and self-determination is established; the dissatisfaction with life, lack of belief in the life progress are noted. Personal predictors of decrease in quality of life could be as follows: inflexibility in decision-making, behavior and social contacts, impossibility to rely on last experience and to predict the future for decision-making in the present, a situation-related behavior, the impossibility of self-determination interrelated with negative world assumptions, difficulties of control over the process and results of life, divergence between planning of the purposes and efforts on search of various means of their implementation.

Four individual-specific variants of the interrelationship of quality of life with resources of personal potential are identified. The findings indicate possible personal prerequisites of formation of alcohol dependence syndrome in rural young people of the North of Siberia.

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## **Increasing the Practice of Personal Creativity as a Tool for Coaching: An Exploratory Study**

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Increasing personal creativity could create the basis of creative living supporting people to build transformational capacity, find meaning and increase satisfaction in life.

This study explored the subjective level of beliefs, attitudes, opinions, experiences and motivations regarding creativity and focused on the idea of increasing personal creativity by integrating certain exercises into daily life. The main goal was to see how specific exercises could be incorporated in the coaching practice and make it more effective.

By developing personal creativity, the coachees will perform better in life in general and in the coaching process in particular.

The research had a two-fold approach exploring two groups of participants: professional coaches and a general population (potential or former coachees). Professional coaches were interviewed one to one or in a focus group. The general population answered an on-line survey following as much as possible the same structure as the interviews (mixing open questions, scales and evaluation of the 10 exercises).

The findings showed that creativity has a central role in the coaching practice and is considered very important by the majority of the participants. Both groups are open to a high degree to integrate certain exercises in their practice and their daily life. Coaches made specific suggestions as to the way these exercises can be successfully introduced in the coaching practice. The analysis of the comments from the survey showed that an introduction, adjustments and proper motivation are necessary for a successful practice. This exploration opens new possibilities for tools and practices in coaching. Further research is necessary in order to establish the effectiveness of the exercises.



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## Translation and Validation of PERMA-Profiler on Romanian Population. Romanian's Well-being Compared to Other Countries

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**Keywords:** well-being, PERMA-Profiler

*Background:* Subjective well-being increases productivity at work, creativity, social relationship quality, makes more effective the leadership and reduces negative emotions and mental illness (Eid & Larsen, 2008). According to Seligman's theory, PERMA-Profiler evaluates well-being in an extensive manner, through components as accomplishments, meaning of life, positive emotions, engagement, relations, health, happiness but also negative emotions and loneliness.[1] Use of the well validated measures to evaluate for large regions or world wide the well-being is an important issue for many specialists, in different fields.[2]

*Aim:* Translation and validation of PERMA-Profiler for Romanian population. Study also aims to compare the Romanian's level of well-being with the level of well-being measured with PERMA-Profiler in other countries.

*Method:* PERMA-Profiler was translated by bilingual specialists into Romanian language (with translation- back translation technique) and applied online to more than 400 volunteer subjects ("snow ball" sampling).

*Instruments:* PERMA-Profiler (Butler & Kern, 2016), WLEIS (Law & Wong, 2004), DERS (Gratz & Roemer, 2004), Comp-ACT (Francis, Dawson & Golijani-Moghaddam, 2016), SWLS (Diener et al, 1985)

Collected data were analyzed with statistical software SPSS and Amos.

*Results:* PERMA-Profiler components share significant medium to high correlations with SWLS, WLEIS, DERS, and CompACT scores ( $r > .5$ ,  $p < .01$ ). Correlations between PERMA-Profiler and other constructs are according to the ones reported in literature. Confirmatory factor analysis is satisfactory. Level of well-being, measured with PERMA-Profiler, for Romanian population is above average, but in line the ones reported for other countries.

*Conclusions:* PERMA-Profiler is a valuable instrument, with good psychometric properties and factor structure, to be used in evaluation of well-being for Romanian population. Present study results show that Romanian's well-being is above the geographic region's one. It is possible to be biased by the use of online volunteers only. Further studies, using larger, representative sample, should investigate if indeed Romanian's subjective well-being is higher than the evaluated one in East and Central Europe.

**Figure 1.** Romanian's well-being compared to other regions/countries

Average Scores	Acomplishment	Engagement	Positive emotins	Meaning of life	Relations	Subjective wellbeing	Health	Negative Emotions
World wide	7.21	7.25	6.69	7.06	6.9	7.02	6.94	4.46
East Europe, Russia	7.03	7.16	6.65	6.61	6.86	6.86	7.2	4.46
Western Europe	7.23	7.16	6.82	6.88	6.95	7.01	7.21	4.27
<b>Romania</b>	<b>7.27</b>	<b>7.38</b>	<b>6.87</b>	<b>7.32</b>	<b>6.91</b>	<b>7.15</b>	<b>7.33</b>	<b>4.69</b>
USA	7.5	7.45	6.83	7.23	7.03	7.21	6.95	4.48
Malaysia	6.52	7.18	6.78	6.92	6.95	6.87	6.69	4.52
Mexico	7.91	8.13	7.85	7.94	7.83	7.93	7.8	4.67

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## Life Values And Subjective Well-Being Among University Students across Cultures: Comparison of Czech, North Indian and South Indian Samples

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**Keywords:** subjective well-being, life values, cross-culture study, university students

*Background:* There is a growing interest in cross-cultural comparison of level of well-being and its determinants across nations. The current study explores the role of life values in subjective well-being in two different countries: Czech Republic and India, which differ in many of the cultural dimensions, specifically in individualism, power distance, long term orientation, and uncertainty avoidance [1].

*Aim:* The main objective of this study was to compare levels of affective and cognitive components of subjective well-being and preferences of life values among university students in Czech Republic and India (North and South sample). We hypothesized significant cultural differences in the level of well-being determined by preference of specific life values.

*Method:* Data were obtained through an online anonymous questionnaire and processed using IBM SPSS23. The sample consisted of 165 Czech, 168 North Indian, and 187 South Indian respondents (309 male, 211 female, aged 17 to 33). Subjective well-being was measured by two scales: *The Satisfaction with Life Scale* [2] to measure the cognitive component and *The Happiness Measure* [3] to measure the affective component. Life values were measured by *The Valued Living Questionnaire* [4]. Data was analyzed via descriptive statistics, Pearson's correlation, linear regression analysis, independent-samples t-test, and one-way ANOVA.

*Results:* The results indicate statistically significant differences between Czech, North Indian and South Indian samples in subjective well-being and preference of life values. North Indian students are happier and more satisfied with their lives than the Southern peers. South Indian students are more satisfied with their lives than Czechs. In the whole sample, females scored significantly higher in life satisfaction and intensity of happiness than males. Perceived importance of the life value Family and satisfaction with this value were placed on the top places among all samples. The life values Citizenship and Friends showed significant relationships to subjective well-being only for Indian samples.

*Conclusions:* The results revealed culturally specific context and differences in the level of subjective well-being and life values. The outcomes suggest that happiness and life satisfaction can be compared across cultures and even in the two samples of one country and used as an indicator of how well students thrive in a society.

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## In Touch With Emotions: Direct Hand Interactions With Emotional Pictures in a Touchscreen Space Influence Their Valence Appraisal

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**Keywords:** positive technology, emotional valence, touchscreen interaction, well-being, basic research

*Background:* Positive Technology is a research field within the field of Cyberpsychology and Human-Computer Interaction, which seeks to investigate and promote the quality of the user's affective experiences [1]. In this field, the use of touch-based devices (e.g., touchscreen monitors or tablets) is raising the question about how interactions with the hands may influence user's affectivity. Recently, this question has been approached from an embodied cognition view. This view suggests that not only perception but also action influence cognitive and emotional processing [2,3]. However, two relevant embodiment research lines still remain relatively unconnected: (a) the near-hand research which suggests, that placing the hands in close spatial proximity to visual stimuli increases the visuospatial attention to the stimuli as compared to a more distant placement of the hands [4], and (b) the research on spatial association of valence, that suggests that the processing of emotional valence is associated with spatial bodily dimensions and related directional arm movements (i.e., lateral, vertical, and sagittal [5]).

*Aim:* We attempt to bring closer those lines of research while investigating the potential of touchscreen interfaces as “positive technologies” from an embodied cognition perspective. Specifically, three studies examined whether and how direct interaction by touching and moving emotional pictures in a touch-screen monitor would affect subjects' affectivity as reflected in their valence appraisals towards the stimuli.

*Method:* Right-handed subjects (N=180) rated in a first session the emotional valence of twenty positive and twenty negative pictures on a Likert scale ranging from 1 (very negative) to 9 (very positive), without directly interacting with the pictures. In a second session, participants rated the pictures' valence after directly swiping them with the right hand on the touchscreen either rightwards or leftwards (Study 1), upwards or downwards (Study 2), and forward or backward (Study 3). We analyzed the valence change between the first and the second session (i.e., valence evaluation with hand interaction minus valence evaluation without hand interaction).

*Results:* Swiping positive pictures directly with the hand leftwards, downwards, or backwards, increased the subjects' positive appraisals towards the pictures. Critically, swiping negative pictures upwards and forwards decreased the subjects' negative appraisals towards the pictures.

*Conclusions:* The results suggest that the user's affectivity, as measured by the valence rating of emotional pictures, may vary depending on the increased attention in the space near the hand when performing directional touchscreen interactions.

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## The Effects of Relationships with Parents, Teachers, and Peers on Adolescents' Vocational Identity and Life Satisfaction

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**Keywords:** parents, teachers, peers, vocational identity, life satisfaction

*Background:* Adolescence is one of an acknowledged period of life that affects how people would live in the future. Among numerous factors which are related to adolescence, significant others such as parents, teachers, and friends affect an individual by providing social support and composing psychological environment in the way that the one copes with life and forms one's own identity during adolescence (Tatar, 1998; Chang, 2014). To explore and achieve personal identity is one of developmental tasks on adolescence, and vocational identity which is known as an influential factor to life satisfaction has been focused because it is available to intervene and is more malleable than other personality traits (Hirschi, 2011). Vocational identity refers to a concept which an individual has and is convinced about one's own purpose, interest, and talent (Holland, 1980).

Even though Marcia's identity status theory gave concern on identity foreclosure status caused when children intend to be submissive to their parents, previous studies have shown that relationship with parents has positive impact on vocational identity of their children (Choi & Lee, 2018; Kwon, 2017; Park & Yang, 2017). Teachers are also significant individuals in regard of identity formation during adolescence (Cohen, 2016; Tatar, 1998). Relationship with teacher has been shown as being influential to vocational identity of students (Lee, 2006). Furthermore, according to a literature review (Rageliene, 2016), relationships with peers are associated with adolescents' identity development even though other related factors remain still unclear. Also, some researchers in Korea has reported the causal relation between relationships with peers and vocational identity recently (Kwon et al., 2017; Moon, 2015; Park & Yang, 2017; Woo, 2017). Positive relationship with parents, teachers, and peers are important because they are key figures of adolescent. This study found that which relationship affects more on adolescents' vocational identity and life satisfaction which indicate their present and future life.

*Aim:* This study was to examine whether relationships with parents, teachers, and peer influence adolescents' vocational identity and life satisfaction, which of relationships impact on adolescents' vocational identity and life satisfaction most, and whether those influence differ between middle school students and high school students. Plus, this study explored the mediational role of vocational identity in the effect of those relationships to adolescents' life satisfaction.

*Method:* The study investigated using data from two waves (Wave 4 and Wave 7) of the Korean Children and Youth Panel survey collected by the South Korean National Youth Policy Institute. Participants were 2092 (1100 boys and 992 girls) in Wave 4 and 1979 (1036 boys and 943 girls) in Wave 7. Pearson's correlation analysis was conducted in order to examine the relations between each variable. Also, multiple regression analysis was conducted in order to explore whether relationships with parents, teachers, and peer influence adolescents' vocational identity and life satisfaction. The analysis was conducted twice, with each data from the middle school year and the high school year. Also, additional analyses were conducted to examine the mediational effect of vocational identity and the Sobel test was adopted to calculate and examine its significance. Gender was controlled statistically because some variables (e. g., relationship with teacher, life satisfaction, etc.) turned out to be dependent to gender.

*Results:* Pearson's correlations indicated that adolescents' vocational identity and relationships with parents, teachers, and peer were positively associated. Also, adolescents' life satisfaction and relationships with parents, teachers, and peer were positively associated. Multiple regression analyses showed that adolescents' vocational identity and life satisfaction were positively predicted by relationships with parents, teachers, and peer in both of two waves. In specific, the most influential factor to vocational identity was relationships with peer when the subjects were middle school students(W4). However, after three years(W7), it turned out to that the most influential factor to vocational identity is relationship with teacher. On the other hand, relationship with parents was the biggest factor on adolescents' life satisfaction during the middle school year, but the most powerful variable to life satisfaction in the high school was the relationship with peer. Finally, mediation analysis using data from both Wave 4 and Wave 7 showed that the impacts of relationships with parents, teacher, and peers on adolescents' life satisfaction were partially mediated by vocational identity.

*Conclusions:* The findings confirmed that relationships with people surrounding adolescent such as parents, teachers, and peers are important factors of their vocational identity and life satisfaction as recent studies have reported (Choi & Lee, 2018; Gang et al., 2017; Lee, 2006; Park & Yang, 2017; Seo & Jang, 2017; Woo, 2017). Furthermore, they showed that the extent how each relationship is important is changing. It implies that the perception about surrounding people changes even during adolescence. Middle school students form their vocational identity opinions from their friends and age group may be crucial, while high school students regard their teacher's advice is trust-worthy. On the other hand, when people are in middle school, their life satisfaction was influenced by their parents' parental style, but relationship with peer is of growing importance as they age. Also, it seems that positive intervention to vocational identity during adolescence might be significantly helpful and effective to promote their life satisfaction as previous research (Hirschi, 2011) expected.



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## Well-being of Third Graders in Taiwan: A Comparison of the Students Living in Remote and Other Areas

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**Keywords:** remote school, school engagement, self-concept, subjective well-being, third graders

*Background:* There has been substantial interest in closing the achievement gap between students living in remote areas and others in Taiwan. In the study, remote areas indicate that areas located in the outlying islands, , aboriginal district in mountain area, or alpine area above 1000 meters above sea level and the traffic is inconvenient. All other areas in Taiwan belong to others group.

Mental well-being is considered as the mental wealth of nations [1]. Schools placing increasing emphasis not just on academic achievement, but also on well-being of the child. In this study, well-being are examined in terms of 10 constructs in the three sections (individual, relationships, and context).

*Aim:* The aim of this study is to compare well-being for 3<sup>rd</sup> graders in remote schools and others in Taiwan. It focuses on subjective and positive measures of child well-being. The results are expected to be helpful to those interested in the improvement of well-being of our children.

*Method:* This study applied a survey for data collection and a two-stage stratified cluster sample design for sampling. A total of 1097 students were investigated, including 971 students from general and 126 students from 12 remote schools. The questionnaire was developed based on the multi-dimensional framework of well-being with emphasis on subjective cognitive development/education, relationships and home and school contexts [2]. Independent t tests are conducted to evaluate the differences between the two groups.

*Results:* Students in remote areas have statistically significant lower scores in academic achievement, academic self-concept, school engagement, family relationships, peers relationships, and educational support at home. There are no significant difference in perceived health, computer use and school safety. Most 3<sup>rd</sup> graders experience positive global well-being (mean score is 8.37 on a single-item measure with a scale of 1 to 10). However, students in remote schools have significant higher global well-being than students in general.

*Conclusions:* Children who report positive relationship with their school are significantly more likely to experience positive academic self-concept, which predicts their school engagement and academic performance [3]. Children's emotional school engagement in primary school predicts their later well-being in secondary school. A higher priority needs to be put on building children's positive relations with schools.

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## A Study of the Positive Side of Work-Family Dynamic

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**Keywords:** work-family balance, work-family enrichment, social support

*Background:* A work-family balance exists when the work and family domains coexist in a harmonious way. In the past the major focus on the work-family balance literature had been put on investigating its negative side, especially on work-family conflict, whereas the positive impacts of the work-family dynamic received much less attention [1]. The concept of work-family enrichment, which represents the positive side on the work-family balance, is referred to as the favorable experience gained by performing different roles in the work and family domains. This experience of enrichment occurs when carrying out one role enhances one's performance or improves one's emotional states in another role [2].

*Aim:* The current study aimed to identify the strength of the relationship between social support and work-family enrichment. It aimed to investigate whether domain specific type of social support would only be beneficial to its corresponding domain (e.g. work support to work domain), or if such positive impact could be equally beneficial in the other domain (e.g. work support to family domain).

*Method:* By adopting a meta-analytic approach, papers related to the positive side of work-family balance were reviewed. Relevant papers were coded for further analysis. A total number of 95 papers with over 50,000 participants from both Western and Asian countries were used in this study. One hundred and eleven effect sizes were input.

*Results:* The weighted mean effect size of the support-enrichment relationship was found to be significant. This magnitude of support-enrichment relationship was stronger when the social support type was paired with its corresponding domain, rather than when the social support type was paired with its non-corresponding domain. Culture and gender comparison on the support-enrichment relationship were also made and results showed different interesting patterns.

*Conclusions:* Results of the study helped to shed light on the literature of work family balance. The findings will be discussed under cultural context.

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## Materialism and Happiness of Korean Middle-Aged

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**Keywords:** materialism, orientation to happiness, subjective well-being, middle-aged

*Background:* According to a recent meta-analysis of the 259 articles on the relationship between materialism and psychological well-being, regardless of the definition of gender, race, state, materialism, is consistently a powerful variable that hampers life satisfaction and happiness[1]. One of the reasons for this is that the materialistic values are most emphasized in the acquisition of or possession of materials among the various goals of life, and they neglect psychological values or desires that are important to happiness[2]. We think that materialism causes unhappiness because it makes it difficult to find the ultimate value and meaning of life. The purpose of this study is to investigate the idea of the material of Korean middle-aged people and to identify the difference between orientation to happiness and happiness, according to the materialism and those values which do not.

*Aim:* Koreans are not happy compared to economic riches. One of the reasons is pointing to materialism. Despite the consistently reported findings that a strong obsession with possessing or acquiring a substance hinders happiness, Koreans struggle to possess more material[3]. This is inefficient in terms of happiness. Investigating the thoughts and values of Korean middle - aged people can be used as a basic data for happiness research.

*Method:* A questionnaire survey was conducted on 489 middle - aged people living in Gyeongsang - do including Busan. The questionnaire includes questions about which of the following is more important: 'love/friendship' and 'money'; And a scale of orientation to happiness was included to measure the way to pursue individual happiness[4]. Also, to measure happiness, we asked about life satisfaction, positive emotion and negative emotion experienced in the last 2 weeks[5].

*Results:* 75%(n=365) of the respondents chose 'love/friendship' and 23%(n=112) chose 'money'. However, considering the national goal, 53%(n=255) of the respondents answered materialism as more important, and only 13.3%(n=65) answered post materialism was more important as the goal of country. Selected 'love/ friendship' and national goals related to post-materialism were 52 respondents. And selected 'money' and national goals related to materialism were 76 respondents. We divided the two groups, 'true materialism' and 'true post-materialism'. As a result, the two groups showed significant differences in orientation to meaning among the three orientation to happiness, and subjective well-being. The 'true materialism' group had lower orientation to happiness than the 'true post-materialism' group. And the subjective well-being was also significantly lower.

*Conclusions:* Korean middle-aged think that psychological value such as 'love/friendship' is more important than 'money' at a personal level. However, when it comes to choosing important national goals, a majority of the respondents indicated that national goals related to materialism were important. Based on these results, though Koreans 'think' that psychologi-

cal value is important, it seems to be the abundance of material that they want to pursue. This contradictory result can be considered as the possibility that the choice of ‘love/friendship’ was high due to social desirability. This study suggests that changes in the individual values and social values are needed to promote happiness for Koreans. We hope that this study will be used as basic data for happiness research.

**Table 1.** Percentage of national goals that each group that selected 'love / friendship' or 'money'

Select 'love/friendship' (n=365)		Selected 'money' (n=112)	
Materialism	179 (49.0%)	Materialism	76 (67.9%)
Post-Materialism	52 (14.2%)	Post-Materialism	13 (11.6%)
Neutral	134 (36.7%)	Neutral	23 (20.5%)

**Table 2.** The difference of orientation to happiness between ‘true materialism’ and ‘true post-materialism’ group

	True materialism (n=76)	True post-materialism (n=52)	F
Orientation to pleasure	20.63 (2.80)	19.10 (2.99)	8.78**
Orientation to meaning	18.79 (3.47)	21.02 (3.15)	13.70***
Orientation to commitment	19.37 (2.96)	20.35 (3.30)	3.01

\*\*  $p < .01$  , \*\*\*  $p < .001$

**Table 3.** The difference of Subjective well-being between ‘True materialism’ and ‘True’ post-materialism’ group

	True materialism (n=76)	True post-materialism (n=52)	t
Subjective Well-being	43.78 (11.12)	50.19 (9.62)	3.38**

\*\*  $p < .01$

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## Subjective Fatigue Does Not Reduce Vigorous Physical Exercises when People Believe that Willpower is Non-Limited

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**Keywords:** physical exercise, sport, implicit theory of willpower

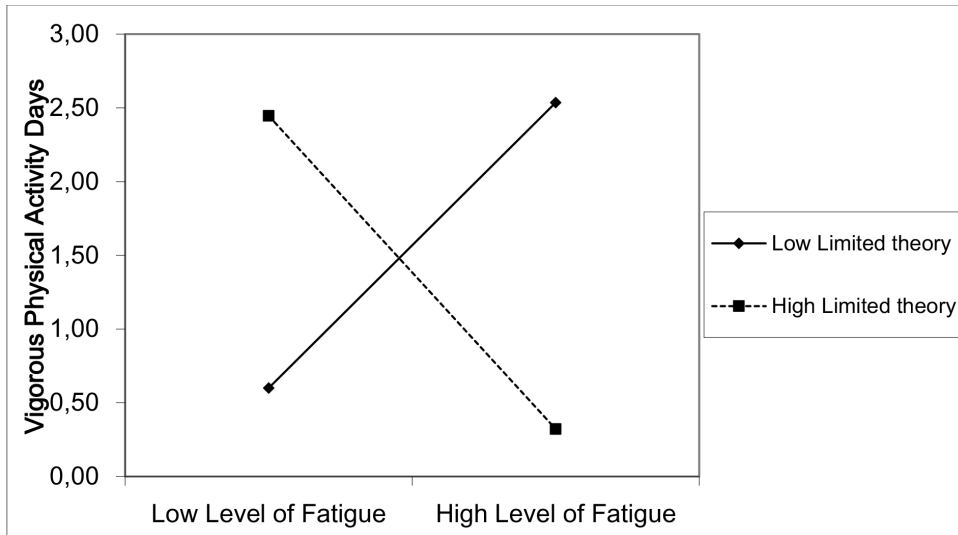
*Background:* Improving human's well-being is an important goal of positive psychology. It is hardly something new that maintaining an optimal level of physical activities contributes to physical and subjective well-being [1-3]. However, it is easier said than done and one of the most common reasons of not adhering to exercise routine is "feeling tired". People who experienced chronic fatigue reported lower level of physical activities [4,5]. Paradoxically, regular exercises were found to protect people from chronic fatigue syndrome [6]. Indeed, the effect of fatigue on physical activities might be different depending on the way people interpret the experience of fatigue. For those who believed that willpower is limited (vs. unlimited) [7], they might interpret fatigue as a sign of depletion and of the need to take a rest. However, if people believed that willpower is non-limited, experiencing fatigue might not activate the "rest goals" [8]. Bernecker and Job (2015) [9] found that people's limited theory of willpower (vs. non-limited) undermined goal pursuit after a demanding day. Previous research seldom investigated the role of implicit theory of willpower in level of physical activity. The present study is probably the first attempt to explore the role of implicit theory in people's level of physical activity.

*Aim:* The present study sought to elucidate how people's lay beliefs of willpower affected their level of physical exercises. In particular, we tested the moderating role of implicit theory of willpower in the association between subjective fatigue and frequency of vigorous exercise.

*Method:* One hundred and eighty three working adults ( $M_{age} = 31.17$ ,  $SD_{age} = 11.34$ ) were recruited through convenience sampling. After obtaining their informed consent, participants were administered a questionnaire that assessed their implicit theory of willpower [7], subjective fatigue [10] and frequency of vigorous exercises in the past week [11] and their demographic information.

*Results:* Regression moderation analysis was used to estimate the moderation effect of implicit theory of willpower. As predicted, implicit theory of willpower moderated the association between fatigue and frequency of vigorous exercise,  $\beta = -0.22$ ,  $t(119) = -2.37$ ,  $p = .02$ . A simple slope analysis suggested that fatigue negatively predicted frequency of vigorous exercises only when people endorsed limited theory of willpower (see figure 1).

*Conclusions:* The present study found that people's implicit theory of willpower moderated the effect of fatigue on frequency of vigorous exercises. Since implicit theory of willpower is malleable [7], it might be a novel point of intervention to promote physical exercise, which is a core element in physical and mental well-being.



**Figure 1.** Implicit theory of willpower moderated the association between fatigue and frequency of vigorous exercise.

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## Mindfulness for Chronic Back Pain using Quantitative Sensory Pain Assessment

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**Keywords:** mindfulness, chronic pain, quantitative sensory pain testing, randomized clinical trial, intervention

*Background:* Findings from clinical trials of Mindfulness-based interventions (MBI) for chronic pain support significant effects on pain. Although evidence regarding the efficacy of MBIs for chronic pain has increased, the mechanisms underlying this effect are not well understood. A limitation of current research is reliance on global measures of functioning or narrow, self-report ratings of pain severity, which may be influenced by emotional and other psychological factors.

*Aim:* The aim of the present research is to explore potential mechanisms that may explain the effects of MBIs on chronic low back pain (CLBP), highlighting the sensory aspect of pain perception. To address the limitation of self-reports we employed advanced quantitative sensory pain testing (QST) in addition to traditional self-report measures.

*Method:* Thirty-six patients with CLBP were randomly assigned to an eight-week MBI or wait-list control. QST measures of thermal and pain thresholds, as well as pain ratings to fixed stimuli, were taken along with self-report measures of chronic pain intensity and interference with daily activities.

*Results:* MBI led to improvement in chronic pain intensity and interference by self-report compared to wait-list. Also, while patients in the wait-list group exhibited an increase in supra-threshold pain ratings (a QST measure, reflecting painful stimuli above pain threshold) over time, indicating an apparent sensitization effect to these painful stimuli, participants in the mindfulness group showed no such increase.

*Conclusions:* Mindfulness practice may have a buffering effect for pain patients preventing sensitization effects that contribute to chronic pain.



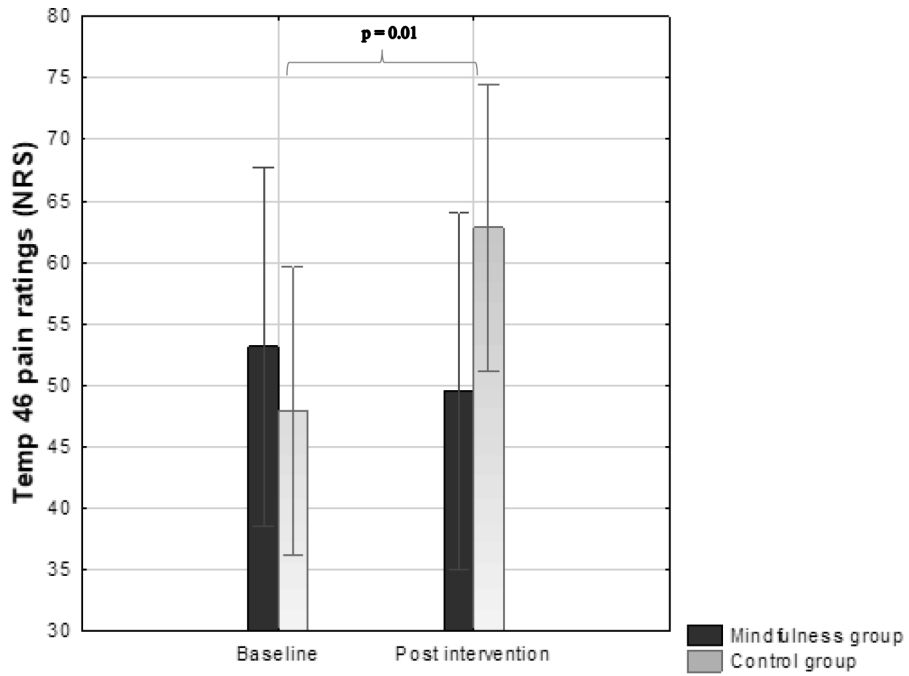


Figure 1. Changes in intensity pain rating of temp 46°C across time and group

### Acknowledgments

In memory of Joshua D. Lipsitz.

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## Design, Implementation and Impact of the Program: “Children Speak: the Children’s Subjective Well-being in Barcelona”

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**Keywords:** children’s subjective well-being, ethics, methods, politics

*Background:* From an ethical perspective, there are resources to carry out responsible research, such as, in Spain, the Code of Good Scientific Practices of CSIC (Consejo Superior de Investigaciones Científicas, 2011), and the American Psychological Association’s Ethics Code (American Psychological Association, 2017).

*Aim:* To present the theory of change of the program “Children speak: the children’s subjective well-being in Barcelona”, besides the research planning and preparation, research design and methods, data collection, as well as analysis, writing and dissemination in accordance to ethical principles.

*Method:* The program is developed under the guidance for ethical research involving children and their considerations about harms and benefits, informed consent, privacy and confidentiality, as well as acknowledgement and compensation (Graham, Powell, Taylor, Anderson, & Fitzgerald, 2013).

*Results:* The program uses Children’s Worlds–International Survey of Children’s Well-Being to know key areas of children’s subjective well-being and related factors, and involves surveyed children in a specific data analysis for disseminating purposes based on their feedbacks and contributions. Some of the surveyed children are appropriately trained to participate in the dissemination in order to achieve the desired impact.

*Conclusions:* Researching social issues with children implies a respectful communication with them, besides thinking about the utility of research for childhood and society, but also for involved children. The fairest is to involve the surveyed children in a specific data analysis and incorporate their feedbacks and contributions into the dissemination of action measures proposed.

### Acknowledgments

The program “Children speak: the children’s subjective well-being in Barcelona” is designed and developed by Childhood and Adolescence Institute of Barcelona (Barcelona City Council) in collaboration with Quality of Life Research Institute (University of Girona).

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## Investigating the Impact of a Kindness-based Reflective Writing Task on the Well-being of UK Adolescents

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**Keywords:** kindness, prosocial behavior, well-being, adolescence, interventions

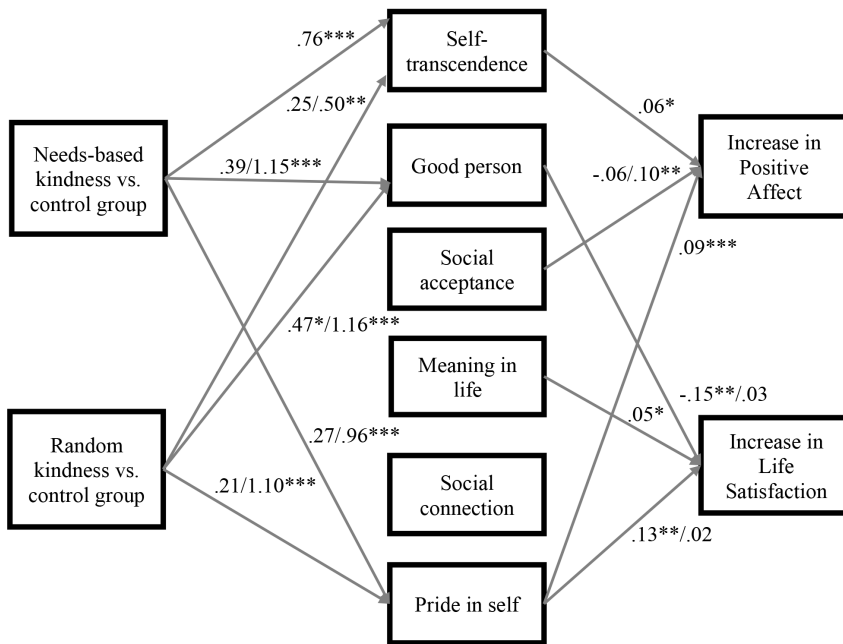
*Background:* There has been a surge of interest from researchers in how kindness can promote well-being [e.g., 1; 2]. and there is growing evidence -- mainly from research with adult populations -- that performing kind acts leads to improvements in well-being outcomes, including positive affect and life satisfaction [e.g., 3, 4]. Little is known about the nature and extent of such impacts of kindness in adolescence, even though it is a key period for the development of relevant value systems and mental health [5]. Further investigation of these links will help to identify the most effective methods for fostering kindness as a well-being intervention in schools.

*Aim:* Recent qualitative research in our group has revealed that adolescents are aware of, and have personally experienced, the well-being benefits of being kind [6]. Moreover, the adolescents in that work also identified a number of social-contextual and psychological factors that support and extend current theoretical frameworks regarding the impact of kindness. The current study aimed to build on this by testing the impact of a reflective kindness activity on aspects of well-being in 350 students aged 11-12 and 14-15 years.

*Method:* Participants were randomly divided into three experimental conditions and were asked to remember and write about a recent experience of ‘being kind to someone who was upset or needed help’ (needs-based kindness), ‘being kind to someone who wasn’t upset or needing help’ (random kindness) or ‘spending time with others’ (control). We also asked students to rate the experience in terms of six eudaimonic aspects of well-being (self-transcendence, feeling like a good person, meaning in life, social acceptance and connection, and feeling proud). Students also completed well-being measures of mood and life satisfaction before and after the writing exercise.

*Results:* Particularly among the 14- to 15-year-olds, several eudaimonic aspects of well-being (self-transcendence, feeling like a good person, feeling proud) were rated more highly for the kindness experiences than for the control experiences. These ratings were in turn found to predict changes in life satisfaction and positive, but not negative, affect from before to after the writing exercise (see Figure 1). Mediation analysis revealed that belonging to a kindness condition, in comparison to the control condition, had a significant indirect effect on increased positive affect via greater feelings of self-transcendence and pride in 14- to 15-year-olds. For 11- to 12-year-olds, writing specifically about needs-based kindness had an indirect effect on positive affect via greater feelings of self-transcendence.

*Conclusions:* Results suggest that reflecting on kindness experiences can predict increases in some aspects of well-being, and that specific emotional benefits of kindness are important. Implications for school-based intervention and characterizations of kindness are discussed.



**Figure 1.** Multi-group model showing effects of kindness condition on positive affect and life satisfaction via eudaimonic ratings for younger (11-12 years) and older (14-15 years) students.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Note. Where significant group differences exist, two coefficients are provided (younger/older). All coefficients are unstandardized. Model fit:  $\chi^2(24) = 26.52$ ,  $p = .327$ ; CFI = .997; TLI = .99; RMSEA = .026; SRMR = .036

Non-significant direct paths from condition to SWB are not shown in this diagram.

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## Using Guided Peer Support to Improve the Well-being of University Students: An Evaluation of the Positive Minds Program

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**Keywords:** education, intervention, well-being, student, university

*Background:* Increasing international research has demonstrated high levels of stress and psychological distress amongst tertiary level students; raising concern about the provision of sufficient, appropriate resources to enable students to cope with university life. Structured peer support programs, that promote positive mental health and provide students with a supportive environment to develop practical coping skills and share experiences, reflect a promising approach that may help to alleviate some of the pressures faced by university counselling services. However, the feasibility and effectiveness of these types of programs needs to be determined.

*Aim:* This study evaluated a peer support program designed to provide young adults with strategies to promote positive wellbeing and reduce or prevent the impacts of stress and low mood. The presentation will examine the expectations and perceived benefits reported by both participants and program facilitators, in the initial implementation of the program at an Australian University.

*Method:* Positive Minds is a 6-week peer-led program. The study comprised an initial sample of 50 first year undergraduate students participating in the program, and 16 second and third year student program facilitators. Measures of subjective wellbeing and engagement were collected at baseline and following completion of the program (immediate and 1-month follow-up). The benefits and challenges of participating in the program were also explored.

*Results:* The presentation will discuss the implementation, acceptability and effectiveness of the program. The majority of respondents reported confidence in the program as being helpful for learning skills for preventing stress and low mood. Prior to commencing, anticipated benefits included a feeling of social connection and being able to share experiences with others. Concerns largely related to a fear of being judged. Program facilitators reported some initial concerns relating to participant attendance and confidence in their ability. Reported benefits related to personal growth and skill development, and a greater sense of community and belonging, for both participants and facilitators.

*Conclusions:* It is vital that we develop appropriate, acceptable and effective strategies for combating stress and improving the wellbeing of our university student population. While further evaluation is needed, this initial pilot supports the implementation of the Positive Minds program as a valuable addition to the supports available for students.

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## Autonomous and Competence Motives Mediate Relationships between Incremental Self-Theories and Well-being

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**Keywords:** well-being, basic needs, self-theories

*Background:* Research on the extent to which people think that intelligence is malleable suggests that incrementalist beliefs (people can change) are positively related to well-being, whereas entitative beliefs (people cannot change) are not [1]. One explanation for this relationship is that incrementalist beliefs are associated with a mastery orientation, whereas entitative beliefs are not [1]. If this is the case then autonomous and competence motives [2] should mediate relationships between incrementalism and well-being because these motives reflect different aspects of mastery.

*Aim:* The present study examined the possibility that autonomous and competence motives mediate relationships between self-theories and well-being.

*Method:* Participants were adults community members (n = 429) who described their hedonic well-being, eudaimonic well-being, general self-efficacy, basic needs (autonomy, competence, relatedness), and implicit theories of the self (incremental and entity beliefs).

*Results:* Regression analyses found that incrementalist beliefs were significantly related to all three measures of well-being, whereas entitative beliefs were not. As series of mediation analyses using PROCESS (Hayes, 2017) found that competence and autonomy motives mediated relationships between incrementalist beliefs and all three measures of well-being (relatedness did not). In each case, the direct effects of incrementalist beliefs on well-being although reduced, remained significant.

*Conclusions:* The present results confirm and extend to the general domain the supposition that a mastery orientation is responsible for relationships between well-being and incrementalist theories of the self. They also conform the importance of the tenants of Self-Determination Theory in understanding self-theories.

### Acknowledgments

The research described in this poster was supported by the Polish National Science Centre (Grant NSC 2013/11/B/HS6/01135).

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## Effects on Nurses' and Patients' Quality of Life of an Educational Intervention to Strengthen Humanistic Practice among Hemodialysis Nurses: A Mixed-Methods Cluster Randomized Trial Protocol

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**Keywords:** humanistic practice, hemodialysis patients, quality of life

*Background:* Hemodialysis patients constitute a vulnerable population with considerable health needs. Empirical studies have raised awareness of the presence of dehumanising care practices in clinical settings. According to the results of a meta-analysis [1], patients confronted with uncaring attitudes feel humiliated, frightened, lacking in control and vulnerable, which can contribute to lengthen physical healing times. A pilot study was built and tested in 2012 in a small sample of nurses in Switzerland. Results showed a high level of acceptability and feasibility of the intervention. Moreover, preliminary positive effects were found regarding the quality of nurse-patient relationship and patients' quality of life [2]. Therefore, a randomised controlled trial was the next step.

*Aim:* The core aim of this poster is to describe the different steps of the protocol, which integrates four steps of measurement and to present the results of the baseline measure.

*Method:* 200 hemodialysis patients and 102 nurses have been recruited. We propose conducting a mixed-methods cluster randomized controlled trial to assess the effects of the educational intervention based on Watson's Theory of Human Caring [3]. The variables measured were nurses' quality of working life, hemodialysis patients' quality of life and the quality of nurse-patient relationship.

*Results:* Results of the pilot study revealed that nurses strengthened their caring attitudes/behaviours toward hemodialysis patients post-intervention. We hypothesize that these results will be confirmed on a larger sample.

*Conclusions:* In the context of dehumanising care practices, the importance of a therapeutic relationship between patients and nurses is crucial. These first results will give a better knowledge regarding patients' and nurses' quality of life and relationship. This study is the first one measuring the impact of an intervention strengthening humanistic practices within a large sample of hemodialysis patients and nurses.

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## **Mind the Gap: Supporting Students to Have a Successful Transition from School to University. Current Practice and Future Possibilities**

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**Keywords:** socio-emotional intelligence, university, transitions, students, induction

*Background:* Over the past three years there has been an increase on students arriving to university with complex barriers to learning. This is something that is a growing concern within the UK higher university sector [1]. With a particular interest in the students' overall wellbeing, within my role in the learning development team I apply strategies related socio-emotional intelligence, an area within the umbrella of positive psychology [2]. The rationale for doing so is to ensure students settle and develop their academic and personal skills in order to succeed. This is particularly important within their first year as students arrive to university with a set of expectations that may be quite different to the reality. Consequently developing an induction process that takes into account their needs and expectations is important. Most students arrive to university without an understanding of the specific requirements regarding academic writing, marking criterion or referencing for example. This on top of having to get acquainted in most cases with a new city, a new set of friends and for some living for the first time away from home. This combination of things can exacerbate their barriers and block their ability to learn effectively, therefore, opportunities to improve our induction process can further support students in developing a sense of belonging to settle and thrive whilst at university whilst developing their socio-emotional intelligence.

*Aim:* To evaluate our current practice and explore the expectations of prospective university students and academic staff within the university regarding the induction process at university and to seek which socio-emotional intelligence attributes are needed or can be developed to succeed.

*Method:* A thematic analysis [3] following a survey with staff and prospective students in a UK university in the south of England.

*Results:* An evaluation of our current induction process revealed that international students settle better following a targeted induction. Within our previous induction programme students were introduced to a set of titles that they should explore based on the premise that knowledge gives confidence [4]. Exploring areas such as resilience, motivation and cultural differences students were able to apply some of its principles to their own experience. These students felt they settled better and managed to develop meaningful relationships. They reported feeling motivated and positive about their university experience. Findings from the survey to prospective students and current academic staff exploring how to further bridge this gap will be fully presented at the 2018 ECPP conference.

*Conclusions:* Preliminary findings suggest that students settle better when there is a targeted induction process which takes into account their current knowledge and understanding and also the development of their socio-emotional intelligence. This supports them in feeling a sense of belonging and settling better which helps them to thrive. More research in the topic should be conducted to further ascertain what areas of socio-emotional intelligence are most needed within this time and which develop due to the support given to students.

### **Acknowledgments**

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## Meaning in Life in Older Adults with Alzheimer's Disease: Relation with Satisfaction with Life and Depressive Symptoms

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**Keywords:** meaning in life, Alzheimer, old age, residential care, well-being

*Background:* A bulk of empirical studies have linked the experience of meaning in life to positive psychological outcomes, such as life satisfaction, and inversely linked it to negative psychological outcomes, such as depression [1]. Moreover, meaning in life seems of particular importance in coping with demanding life events. In this regard, it might be an especially valuable resource in old age. While empirical evidence has indeed identified meaning in life as an important factor in late life functioning [2], also and maybe especially for older adults in residential care [3], it has received little attention in older adults with dementia. As the number of individuals in our society confronted with dementia is rapidly increasing, a positive psychological approach can contribute to the improvement of their well-being and provide a counterweight to the often negative public discourse surrounding this population.

*Aim:* To investigate whether previous findings regarding the link between meaning in life on the one hand and life satisfaction and depressive symptoms on the other hand in the general population can be replicated in the population of older adults with Alzheimer's disease in residential care settings.

*Method:* 138 older adults from 9 residential care settings in Flanders, Belgium were interviewed by means of structured questionnaires, including the Presence of Meaning subscale (PoM; Meaning in Life Questionnaire, short form), Satisfaction With Life Scale (SWLS), Geriatric Depression Scale (GDS; short form), and Mini-Mental State Examination (MMSE). To take into account the nesting of individuals within residential settings, multilevel modeling was performed. In two hierarchical models, the predictive value of PoM was investigated on (1) SWLS ( $N = 90$ ) and (2) GDS ( $N = 91$ ), controlling for demographics (age, sex, and marital status) and cognitive status (MMSE). Based on fit indices, a random intercept was included in the model predicting SWLS. For the prediction of GDS, no random effects were included.

*Results:* Both life satisfaction and depressive symptom scores were significantly predicted by presence of meaning in life scores, while controlling for demographics and cognitive status. Furthermore, for the prediction of depressive symptoms, post-hoc analyses revealed a significant interaction effect between presence of meaning and cognitive status, with a stronger negative relation between depressive symptoms and presence of meaning scores for individuals with a lower cognitive status.

*Conclusions:* We replicate the link between presence of meaning in life and the psychological outcome measures of life satisfaction and depressive symptoms in the population of older adults with Alzheimer's disease in residential settings. The results underscore the importance of acknowledging meaning in life as a relevant concept for the psychological health of individuals with dementia.

### **Acknowledgments**

We thank the participating residential settings and residents, and Lotte Van Looy for her help in collecting the data.

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## Can Well-being Be Enhanced through an Inclusive Emotional Intelligence Training?

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**Keywords:** emotional intelligence, well-being, mindset, grit, gratitude

*Background:* Emotional Intelligence (EI), a concept which emerged in the last few decades as part of an examination of the links between emotions and cognition, is increasingly viewed as one of the more important sets of skills required for personal, professional and academic success. Among other outcomes, it has been linked with mental health and well-being among students. In particular, positive emotions have been linked to students' well-being and improved learning. While social-emotional learning programs, as well as positive education programs, have been increasingly implemented in schools, these do not typically integrate the two important concepts as well as other concepts such as Grit and Growth mindset that have been noted highly important to students' well-being and success. In particular, in the academic arena in Israel, soft skills programs of any kind have been mostly neglected.

*Aim:* The aim of the present study is to investigate the links between EI and a number of concepts which have been shown to contribute to students' success, including well-being, growth mindset, grit, gratitude and empathy. Additionally, the impact of an integrated EI training on EI and well-being among higher-education students is examined.

*Method:* 87 students from a college in northern Israel took part in the study. All participants have undergone a 4 months of EI training. The training program included 13 lessons, 1.5 hours each, all focused on EI and its links to growth mindset, grit, gratitude and empathy. The lessons included lectures, workshops, exercise and reflection. In order to assess the impact of the training and the links between the examined concepts participants were asked to fill out pre-post questionnaires, including EI, Subjective well-being, Gratitude, Growth mindset, Grit and Empathy questionnaires, both before starting the training and after its completion.

*Results:* general EI was found to be linked to well-being, while specific EI sub-factors were found to be linked to gratitude, growth mindset and grit. Similarly, well-being was correlated with both growth mindset and empathy while gratitude was linked to growth mindset and to grit. Emotional intelligence was found to increase among post-training participants as compared with pre-training evaluations. While well-being did not increase significantly, its links with EI, increase in gratitude, as well as interview and diary analysis suggest that it may take longer to exhibit.

*Conclusions:* Based on the findings, it can be concluded that developing EI using an inclusive approach which incorporate well-being and other important skills such as gratitude, growth mindset and grit, may help systems of higher education equip students with the skills required for success and may improve the well-being of students in the 21st century. The focus given to each of the components within the program should be carefully examined.

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## Well-being in Provincial Capitals of Indonesia Country According to PERMA-Profilier

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**Keywords:** flourishing, eastern culture, PERMA, Indonesia

*Background:* Indonesia is an archipelago country with 5 main islands in Eastern Culture. Most are centralized in Java Island: 56.9% of the population, 58% of the financial turnover, and 48% of universities are in Java. 37% of internet accesses are in Jakarta (Capital country in Java island). The government of Republic of Indonesia adopts 3 indexes of public welfare in terms of 3 dimensions (social justice, economic justice, and fairness, economic justice and democratic justice and 22 indicators. However, these indicators limitedly, instead of holistically, measure the objective well being only, since the subjective one is not yet at all.

*Aims:* The main purpose of the research were (1) to measure of public well-being in Indonesia; (2) to map the 5 pillars of the citizen well-being in Indonesia; and (3) to measure of public well-being each city (7 cities).

*Methods:* This research translated well-being measurement by means of PERMA-Profilier with 5 pillars: Positive Emotion, Engagement, Relationship, Meaning, Accomplishment (PERMA), also Negative Affect and Health (23 items with 11 point from 0 to 10 ). This study also used demographic variables (gender, education, marital status, occupational, income). The research subjects were residents of Indonesia lawfully holding 7 provincial capital ID-Cards (N= 1574) with age up 21 years old in 5 big islands.

*Results:* The results of the research showed that the reliability of PERMA Profiler (Cronbach's  $\alpha$ ) was 0.895 with mean of overall well-being= 6.98 (Positive Emotion = 6.95; Engagement = 6.98, Relationship = 7.46; Meaning = 7.61; Accomplishment = 6.96), Negative Emotion= 6.04, Health= 7.40, loneliness = 5.20. Flourishing of Indonesian people is 29%. The highest overall well-being and flourishing is Surabaya city (in Java Island) and every city has different result of pillar of PERMA. There is no difference in gender, education, occupational, marital status and income level, but age above 55 years old had lower flourishing to compare other ages ( $p < 0.05$ ).

*Conclusion:* Gender, Marital Status, and Education were not determinant to flourishing. Flourishing in Indonesia is low. The results of this research indicate that flourishing population of provincial capital outside Java is still lower than that in Java too. It was a preliminary research in 7 provincial capital in 5 big islands. Accordingly, it needs to be further developed in other cities and regencies in Indonesia. Accordingly, it needs to be further developed in other cities and regencies in Indonesia. So, Government can develop program for each city.

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## **The Role of Servant Leadership in Developing an Ethical Culture in Organisations**

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The focus of positive leadership is on the application of principles of positive psychology in leadership. There has been a shift in organisations towards leaders who are positive and able to create a positive and ethical work climate through the building of strong trusting relationships among team members. This study investigated the positive leadership role of servant leadership on ethical culture in organisations. The aim was to analyse the causal influence of integrity, servant leadership and trust in leaders on the development of an ethical culture. A review of relevant literature culminated in a theoretical model depicting the proposed relationships among the latent variables. The model was empirically tested with a sample of 279 employees from different industries in South Africa. Data were analysed by means of item analysis and confirmatory factor analysis conducted via structural equation modelling. Positive relationships were confirmed between integrity and trust in a leader, integrity and servant leadership, servant leadership and trust in a leader, servant leadership and ethical culture, and between trust in a leader and ethical culture. The results illustrated that ethical value-laden approaches to leadership lends itself to the creation of an ethical culture through trusting relationships with employees. Organisations should therefore actively pursue servant leadership initiatives to capitalise on the performance benefits of positive leadership outcomes such as enhanced mutual trust and ethical cultures.

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## A Standardisation Study of the Czech Version of the Workplace Well-being Questionnaire

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**Keywords:** well-being, PERMA, flourishing, workplace, psychodiagnostics

*Background:* The Presented Inventory comes from Hungarian version of the Workplace Well-being Questionnaire created by Ágota Kun [2] and her research team. It is based on Seligman's PERMA model of happiness elements (Positive emotion, Engagement, positive Relationships, Meaning, and Accomplishment). This Inventory was standardized for Czech environment to measure the level of workplace well-being with respect to higher fluctuation in Czech Republic based companies.

*Aim:* The aim of this study is to confirm the multidimensional model of workplace well-being and standardize the inventory in the Czech workplace. In addition, the first validation was realized with 4Elements Personality Inventory [1] to verify how each dimension correlates with personality traits defined by this typology.

*Method:* The Hungarian version of the questionnaire was standardized with 242 Czech employees. 35 items from the original questionnaire were translated from English to Czech, 7 points Likert scale was used (unlike original 5 points) verbalized from 1- totally agree till 7- totally disagree. Data was collected from April to June 2017 by Psychology students from Charles University. The item analysis and reliability evaluated by Cronbach's alpha coefficients of internal consistency were provided. The preliminary scale structure was evaluated by factor analysis with Varimax rotation. As a validation tool the 4Elements Personality Inventory was used and completed by Psychology students from Charles University (N=39). The reliability of the last Czech version of the questionnaire (N=1514) expressed with the Cronbach alpha coefficient is 0,794 for *Air*, 0,835 for *Earth*, 0,889 for *Fire* and 0,805 for *Water*.

*Results:* The individual result clearly indicates the level of well-being of the employee in 6 dimensions and overall result in percentiles. Factor analysis showed six dimensions correlated with raw score as showed in Figure 1.

The reliability expressed with Cronbach alpha coefficient is 0,92 for the whole questionnaire, for each dimension varies from 0,64 till 0,86. The lowest value is in Negative aspects of work dimension, 0,64. Split-half reliability for PERMA dimensions varies from 0,72 to 0,89, in Negative Aspects of Work dimension it is 0,42.

The validation with 4Elements Personality Inventory [1] showed positive significant correlation with Earth personality trait ( $r=0,407$ ) and negative significant correlation with Water trait ( $r=-0,316$ ).



*Conclusions:* Factor analysis confirmed the original version of the questionnaire. Despite our model considers 3 items in a different dimension than in the Hungarian model, the raw score of the original questionnaire correlates the best with the factor analysis of the Czech version. Thus we can use the original model in the Czech Republic.

**Figure 1:** Raw scores and factor saturation correlation

Raw score and factor saturation correlation						
	RS_R	RS_E	RS_P	RS_M	RS_A	RS_N
R	,924**	,196**	,275**	,188**	,092	,405**
E	,103	,681**	,201**	,516**	,270**	,404**
P	,263**	,532**	,745**	,107	,211**	,153*
M	,162*	,256**	,239**	,661**	,493**	,122
A	,089	,266**	,385**	,354**	,593**	-,056
N	-,036	,110	,115	-,033	,107	,650**

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## Choices of Different Subjective Quality: Inner Structure and Phenomenology

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**Keywords:** choice, subjective quality of choice, factor structure, phenomenology

A problem of choice is one of universal problems, common to all humankind. In most real life situations it is essentially impossible to find an *objectively* “right” or, at least, optimal decision of a task; thus, the *subjective* quality of choice process seems to be a critical issue and should be an object of a special study.

In earlier research ([1], [2]), we found four qualitative dimensions of choice which are invariant for various real life choices: elaboration, emotional valence, autonomy, and satisfaction with the outcome. We developed and validated a 23-item questionnaire called the *Subjective quality of choice technique* (SQC) based on semantic differential methodology and measuring these key choice parameters.

The aim of the current study was to investigate differences in the subjective experience of “high”-quality (HQ) and “low”-quality (LQ) choices by comparing their inner structure and phenomenological descriptions.

We proposed the participants (N=130) to recollect two different choice situations (HQ and LQ ones) from their experience (in randomized order). We asked them to describe these situations, evaluate them by the SQC, and fill a number of self-report measures.

We compared the descriptions of HQ and LQ choices using quantitative and qualitative data analysis. Using t-test, we found significant differences in 3 of 4 scales of the SQC: HQ choices were evaluated as much more mindful, pleasant, and satisfying, than LQ ones. Using correlation analysis of SQC-scales (separately for HQ and LQ choices), we found differences in associations between scales: for instance, autonomy was positively associated with emotional parameters of choice process only in case of HQ choices. Factor analysis of the SQC-items (separately for each type of choice) showed that in case of HQ choices autonomy scale was split into 2 different factors – *independence* (“I have made this choice on my own (independently)/ following the advice of my folks”, “depending only on myself/ hoping for others’ assistance”, etc.) and *voluntariness* (“in line with my desire/ without a desire”, freely/ under pressure”, etc.). On the contrary, there were no references to voluntariness in choice in free descriptions and structure of LQ choices.

In other words, this refers to the issue of *agency* as the key point which differentiates HQ choices from LQ ones. A good autonomy in choice does not mean only lack of pressure and/ or advice – it means having a possibility to be the author of one’s choice, taking the initiative in the process (which is also associated with positive emotions during choosing). Here we can see the parallel with “negative” and “positive” liberty (I. Kant, E. Fromm, I. Berlin, C. Taylor).

Thus, speaking of choice is hardly meaningful without specifying its subjective quality. The regularities found on the situations of HQ choice cannot be generalized for the choices of lower quality, and vice versa.

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## An Evaluation of a Marital Education Program for Chinese Couples

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**Keywords:** evaluation, marital education program, Chinese couples

*Background:* Since the 1980s, Taiwan's crude divorce rate has risen steadily [1]. The government has also explicitly stipulated that popular family education courses should be provided in combination with government and non-governmental resources. Its content and type are mostly lectures, discussions and practical exercises. However, Taiwan's current marriage and education work have greatly relied on the results of Western academic research. Therefore, it is often the focus of program activities on how to assist both spouses in communicating and expressing emotions. It does not highlight the characteristics of Chinese's implicit feelings pointed out by local institutes. Therefore, the research is based on a previously developed local marital education program, which is also the outcome of an action research. With this program, local marital education can be promoted more effectively in practice.

*Aim:* The aim of the previously developed marital education program was to look at the need of practitioners and potential service population as well as indigenous marital research. It was characterized as localized, pleasure, privacy, profession, and diversity. In addition, "relationship enrichment" and "couple consensus" are the two major goals. Therefore, this study will also use those indicators in the program evaluation process.

*Method:* Need assessment, process evaluation and outcome evaluation are performed [2]. We conducted two focus groups to do the need assessment, with 5 male potential program participants and 6 marital education practitioners as focus group members. The process evaluation included periodical logs of each collaborative team members, focus groups and qualitative interviews of the program participation afterwards. The outcome evaluation were questionnaires implemented at the beginning of the program (pre-test), the end of each sessions (post-test), and after the program (2 follow-up tests).

*Results:* We held the marital education program 5 times, with a total of 37 couples (74 individuals) participated. Result of the qualitative analyses indicated that couples are satisfied with the course and agreed that their marriages are enriched in many ways. Quantitative analyses also showed that marital satisfaction and marital affection were significantly higher after participating the course and the effect could last for 1 month. It showed that the program did achieve some of the goals we set.

*Conclusions:* This research is based on the previously developed indigenous marriage education program, combining existing knowledge and research into practice. It can be found from overall program evaluation that it is beneficial for couples participating in the marital program courses. The limitation of the study is that the sample size is too small, which makes our conclusions can only be seen as tentative. However, the innovation of the program design and the framework of the program evaluation may still shed light for the future researcher and practitioner.

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## Happiness – Modern vs Ancient Greek Perceptions

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**Keywords:** happiness, positive psychology, Greek philosophy, makarios

*Background:* Several academics have pointed out that the word “happiness” means one thing in modern positive psychology, and meant another in ancient Greek philosophy. Indeed the word happiness corresponds to at least three words in Greek, *hedone*, *eudemonia*, and especially *makarios*. The latter can briefly be defined as happiness experienced by the gods. It is also used in the Christian gospels. Despite being a major concept, it is not taken into account in positive psychology.

*Aim and method:* This paper aims at exploring the differences between these approaches and suggests that modern views might be complemented in the light of Plato’s views [4] on what is today called « happiness ».

First, modern views will be briefly reviewed. Positive psychology considers happiness in two ways. Hedonic happiness derives its meaning from the notion of subjective well-being with its affective and cognitive components. The salient features of eudaimonic happiness include first the experience of life purpose, challenges and growth, in keeping with Abraham Maslow’s pyramid of needs, and second Carl Rogers’ ideas about the fully functioning person [5].

Other approaches are close these two previous notions. The good life [6] overlap with the concepts of hedonic and eudaemonic happiness. Experiencing “flow” [2] is one of the characteristics of the fully functioning person, living in the here-and-now.

Hedonism has its roots in Greek philosophy. Democritus emphasized contentment and cheerfulness, whereas Aristippus of Cyrene insisted that the only intrinsic good is pleasure, that is the absence of pain, but especially enjoyable sensations.

For Epicurus, the purpose of philosophy was to attain the happy, tranquil life, characterized by *ataraxia* (peace and freedom from fear) and *aponia* (the absence of pain) and by living a self-sufficient life surrounded by friends.

Eudaimonism is inspired from Aristotle’s *Nicomachean Ethics* [1]; *eudaimonia* can be defined as leading a meaningful and moral life.

However, Plato’s works, that is Socrates’ teachings, suggest a form of happiness beyond hedonism and *eudaimonia*: *makarios*. This concept will be discussed, based on precise references in Plato’s works. *Makarios* might correspond to the notion of ideal happiness as defined by Tatarikiewicz [7], which he opposed to actual happiness. Ideal happiness corresponds to a lasting form of happiness; being ideal, it appears as difficult to attain. Actual happiness is closer to the usual human experience, as studied in positive psychology.

### Conclusion

The concept of *makarios* is close to Maslow’s “peak experience” and exploring it might open new vistas of research for positive psychology.

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## Rogers, from Wikipedia

An increasingly existential lifestyle – living each moment fully – not distorting the moment to fit personality or self-concept but allowing personality and self-concept to emanate from the experience. This results in excitement, daring, adaptability, tolerance, spontaneity, and a lack of rigidity and suggests a foundation of trust. "To open one's spirit to what is going on now, and discover in that present process whatever structure it appears to have" (Rogers 1961)[15]

## Cf the good life in Rogers

7. A rich full life – he describes the life of the fully functioning individual as rich, full and exciting and suggests that they experience joy and pain, love and heartbreak, fear and courage more intensely. Rogers' description of the good life:

This process of **the good life** is not, I am convinced, a life for the faint-hearted. It involves the stretching and growing of becoming more and more of one's potentialities. It involves the courage to be. It means launching oneself fully into the stream of life. (Rogers 1961)[15]

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## Abstract Title Optimism – a Systematized Approach to a Challenging Concept

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**Keywords:** optimism, psychology, history, religion, time

*Background:* Optimism is challenging to define according to Martin-Krumm [4] and Chang [1]. These two authors, in reviewing the question, cite various concepts, which are potentially confusing. Still, they tend to agree that optimism is mostly an attitude. As such, it has been explored by psychologists, but also by philosophers, and even historians. Further complexities arise since optimism is also a prevailing attitude in religiously-oriented people. So various fields incorporate the subject, in apparently separate ways.

*Aim and Method:* This poster, presented as a table, suggests a way to study optimism systematically, through classifying various views on it. Moreover this approach makes it possible to see a larger picture, thus subsuming all these domains.

This systematic approach posits that optimism means a positive attitude towards two constructs: the self, and the world. These two constructs are subdivided into three aspects: the present, the past, and the future.

Thus, six sub-parts emerge, which allow to classify, surprisingly enough, the various concepts developed by researchers, psychologists, philosophers, and even theologians.

*Conclusion:* This systematic classification gives its allotted place to each of the various approaches. Therefore, optimism can be seen as a timeless, unbound notion, inserted in time by human experience. Religious optimism, not exclusive of time-bound optimism, could arguably be considered as the safest kind of optimism. Further research might confirm this hypothesis.

**Figure 1.** "Objects" and Time periods

	Past	Present	"Near" Future (materialistic view of human beings)	"Far" Future (idealistic view of human beings)
Self	Remembers good experience more	Self-esteem Various areas	Self-confidence about one's plans	Self-confidence about one's salvation
The World	Considers the past as more good than bad (history, events)	Seeing the positive rather than the negative	Trust in the future	Faith in the future; Ultimately : heaven, moksha, nirvana, etc.



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## Character Strengths, Mindfulness and Physical Activity in Preschool and School – A Design-Based Research Project

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**Keywords:** applied positive psychology, character strengths, mindfulness, physical activity, age 5-15

*Background:* The study is a design-based research project funded by the municipality of Haderslev in Southern Denmark. The municipality faced severe problems related to inclusion in pre-schools and schools. Consequently, a collaboration between the municipality and the research group was initiated and a design was developed. After pilot-testing the design in two pre-school groups and two school classes in 2015 the design was developed and tested in additionally four groups/classes in 2016. In 2017 the design was further developed and 45 new groups/classes were included.

*Aim:* The design combines positive psychology, mindfulness and physical activity aiming to create inclusive learning environments focusing on a resource perspective.

*Method:* On a weekly basis teachers and pedagogues follow a specifically designed program introducing character strengths combined with mindfulness and physical activities reflecting the character strength in question [1] [2] [3]. The design and its outcome has been and is currently being evaluated and documented through empirical data consisting of semi-structured interviews (25 teachers, 25 pedagogues and 60 children), field observations, national test in Danish and Math, and national obligatory questionnaire on well-being. In addition, the long-term effects are studied based on questionnaires.

*Results:* The project has shown positive results within the following areas; concentration, social skills, language skills, inclusion, learning and well-being. The municipality has recently launched a strategy with the ambition to implement the project throughout the region.

*Conclusions:* The two pilot studies show that the design is creating positive, inclusive learning environments. A teacher captures this by saying; “*It changes the focus from me to us and that we all can do something special. That everyone is good at something*”. The preliminary results of the current project show similar to the pilot projects that the activities contributes to an inclusive, resource oriented learning environment.

### Acknowledgments

The municipality of Haderslev, school and institutions in the municipality of Haderslev.

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## Academic Psychological Capital and Its relation with Emotional Regulation in University Students

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**Keywords:** Academic Psychological Capital, emotional regulation, university students

*Background:* The current requirements in the professional development imply that our students have to develop some personal and social skills to their adequate preparation to the working world. The construct of psychological capital (PsyCap) [1] defined as the individual positive psychological development that requires having: self-confidence, positive expectations of success, persistence in the goals achievement and the ability to recover oneself through problems or adverse experiences. This construct has turned into one of the central themes of research in Positive Organizational Behaviour (POB) and it would be interesting apply it to higher education in order to attend to the development of some personal resources and skills which are relevant to their integral career development.

*Aim:* The aim of this study was assess the development of the psychological capital in university students, and analyze if there are significant differences between different types of degrees. As secondary aim, we also assessed their difficulties in emotional regulation and analyze the relations between this emotional competence and two of the psychological capital resources (hope and self-efficacy).

*Method:* Our sample was formed by 180 university students from Business, Computer Science and Education degrees. We used the Academic PsyCap Scale (reliability Cronbach's alphas  $\alpha = .89$  to  $.93$ ) [2]; and the Difficulties emotional regulation scale ( $\alpha = .88$ ) [3] We also used the Adult Dispositional Trait Hope Scale (ADTHS) ( $\alpha = .82$ ) [4] as an additional measure of hope. Data was analyzed via descriptive statistics, ANOVA, Pearson's Correlations and multiple linear regression analysis.

*Results:* Our results confirm that there are significant differences in some of the PsyCap components between different degrees. And we found significant relations between their difficulties of emotional regulation and their level of PsyCap.

*Conclusions:* *Academic PsyCap* provides students with relevant resources to their academic success and prepares them to be successful in their future working life. Our results confirm the necessity of the implementation of educative programs to the development of PsyCap and other resources as emotional competences in university students.

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## **Character Strengths – Stability, Amenability to Change, and Associations With Well-Being**

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**Keywords:** character strengths, well-being, stability, reliability

*Background:* Character strengths are assumed to be stable across time and situations, but also amenable to change due deliberate intervention or to life events [1, 2]. They are often used as a basis for interventions in order to increase well-being due to their robust associations with well-being [e.g., 3]. However, there are two gaps in existing research: (1) Previous studies on stability did only consider one assessment instrument and exclusively focused on rank-order stability; (2) relationships with well-being have mainly been examined in cross-sectional studies.

*Aim:* The present study aimed at narrowing these gaps by examining the rank- and mean-order stability of two frequently used measures of character strengths, and studying whether (naturally occurring) changes in character strengths go along with changes in well-being.

*Method:* For this purpose, two samples were analyzed that completed online surveys of different measures of character strengths and instruments for the assessment of well-being, ill-being, and health across two, and three and a half years, respectively.

*Results:* Results showed that character strengths are stable across time periods of up to three and a half years regardless of the used measurement instrument. Further, relationships between changes in strengths and well-being are highly parallel to findings from cross-sectional studies. Results also showed that for strengths such as humor, spirituality, or prudence natural changes occur more often than for other strengths..

*Conclusions:* These results might hint to a differential amenability of change among character strengths and therefore bear important information for selecting character strengths for intervention studies.

### **Acknowledgments**

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## Love Scripts In Younger And Older Adults

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**Keywords:** love, emotional scripts, narratives, adulthood, positivity

*Background:* Cognitive scripts are the situational schemas containing abstractive knowledge on a domain. Affective scripts encompass information on personal experiences emotionally laden. They are kinds of the emotional scenes. People possess different schemas /scripts of love. The content of love scripts may be assessed through analysis of narratives about love. Unlike young people, the love scripts among older people are not often the subject of scientific interest [1]. Typical developmental changes for senior age as decreasing of discursive and cognitive efficiency may impair construction of narratives. The emotional developmental changes in senior presented in the literature are as follows: increasing of positivity of memories, increasing the efficiency of regulation of emotions, maximizing the satisfaction of personal relationships [2].

*Aim:* The aim of the study was to examine the differences between younger and older adults in the love scripts.

*Method:* Two groups of adults have been examined: younger adults (n= 30; M age=29.4+/-3.5), older adults (n=30, M age=59.4 +/-6.2). The participants have been asked to write a story about love looking at the photograph. They have been asked to write a story about feelings, thoughts, causes, actions, and ending of the situation. The analysis takes into account the formal characteristics of scripts (i.e. number of main plots, number of words), and the indicators of the content of scripts such number of attitudes toward others, from others, descriptions of positive emotions, descriptions of negative emotions [3].

*Results:* There were no differences in the formal structure of narratives about love between younger and older adults. The only difference has been found refers to the number of words in the love stories; younger adults used more words ( $p=.007$ ). The significant differences have been found in the content of love scripts. Older adults used in their narratives more positive names of emotions such as happiness, joy, hope, power while younger adults more words related to relief. Younger adults used more names of negative emotions in their stories about love such as grief, anxiety, surprise, aversion, and uncertainty.

*Conclusions:* The results confirmed the tendency of increasing positivity of memories. It is manifested in the tasks involving autobiographic, episodic and semantic memory. The higher positive love script in older adults may be an effect of the increased positivity inclination named also idealization effect. It may reflect also their mature emotional regulation or increasing sensitivity to essential human values (i.e. closeness, relationships).

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## Character Strengths in Romantic Relationships

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**Keywords:** character strengths, satisfaction with life, romantic relationship

*Background:* Quite a large number of studies have focused on relationship between character strengths and satisfaction with life so far. Some character strengths such as hope, zest, love, gratitude and curiosity are positively related to satisfaction with life [1, 2]. Yet little in terms of character strengths and satisfaction with life has been researched in connection to romantic relationships. Namely, people choose partners and spouses with whom they either have some qualities in common or they are similar to one another. Since character strengths influence our behavior, we believe that they represent an important role in partner seeking.

*Aim:* The first aim of the study was to use the shorter version of the VIA-IS questionnaire (VIA-120) [3] on the Slovenian sample for the first time and to test statistical characteristics of the questionnaire. Secondly, gender differences and relationship between character strengths and life satisfaction in the sample were investigated. Finally, the goal was also to examine the similarity of character strengths between romantic partners compared to randomly paired couples.

*Method:* There were 44 heterosexual couples in the sample, participants were between 18 and 57 years old ( $M_{age} = 24.73$ ,  $SD_{age} = 8.08$  years). The average duration of their relationships was  $M = 4.61$  years. Participants filled in the online versions of the VIA-120 [3] and SWLS [4] questionnaires in Slovenian language.

*Results:* Results have shown similar gender differences as were reported in previous studies: women had higher results on most of the character strengths (e.g. gratitude, kindness, appreciation of beauty, teamwork, love, fairness, love of learning, leadership, spirituality, social intelligence, and prudence) and men scored higher on bravery and honesty. Results have also replicated relationship between character strengths and life satisfaction (love, zest, curiosity, hope, and gratitude showed highest correlations). Moreover, romantic partners were more similar to each other in the endorsement of two specific character strengths (spirituality and leadership) than the randomly paired couples.

*Conclusions:* Present study has confirmed findings from the previous studies concerning relationship between character strengths and life satisfaction as well as gender differences in a Slovenian sample, thus validating the shorter version of the VIA-IS survey (VIA-120). We have also found that there were important similarities between romantic partners in character strengths of spirituality and leadership. The role of character strengths in romantic relationships will be discussed.

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## **“The Unexpected Gift of a Break-up”: Post-breakup Growth and Forgiveness to the Ex-partner in the Context of Divorce and Separation in a Chilean sample**

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**Keywords:** forgiveness, divorce and separation, romantic attachment, emotional regulation

*Background:* Separation and divorce are often accompanied by a wide range of emotional reactions, ranging from relief when relationship dissolution involves the end of an unsatisfactory relationship, to intense suffering and discomfort (Tashiro, Frazier & Berman, 2006; Sbarra, 2015). There are several direct consequences of separation as higher anxiety, depression and anger, reduced self-esteem, physical health problems, as well as a decrease in life satisfaction (Amato, 2010; Hughes & Waite, 2009; Sbarra et al., 2012)

Although reactions to romantic break-ups, separations or divorces are generally associated with negative psychological consequences, nevertheless recent literature points out that there might be also a positive side of a break-up. Certain people succeed in overcoming a critical, stressful experience in a positive way, even though this does not necessarily imply the absence of painful effects on that event (Bratkovich, 2010; Buck, 2006; Bustos 2011; Hebert & Popadiuk, 2008; Roddy, 2008; Tashiro & Frazier, 2003; Valladares, 2011).

*Aim:* The aims of the present study are, first to examine the individual differences in post-traumatic growth, and second, to explore the role of growth and forgiveness to the ex-partner in enhancing the post-divorce adjustment.

*Method:* The sample consisted of 1035 separated or divorced Chileans aged 20-65 ( $M = 37$ ,  $SD = 11.78$ )

who completed the Posttraumatic Growth Inventory Short Form [9] and the Forgiveness in Divorce and Separation Questionnaire [10], and the Satisfaction with Life Scale in their validated versions to the Chilean context.

*Results:* Results revealed that the intensity of trauma related to the separation was associated with greater post break-up growth, which in turn increased the level of forgiveness and decreased the current suffering. Also, and after taking into account the reported level of trauma related to the separation, the degree to which participants perceived positive changes (post break-up growth) and have forgiven the ex-partner, predicted a significant proportion of their current satisfaction with life. Moreover, forgiveness, more than growth, played an important role in decreasing suffering and reinforcing satisfaction with life

*Conclusions:* The results highlight the coexistence of negative and positive consequences of a break-up and point out that a satisfying life can be a product of coping with difficult situations as long as they evoke positive change in ourselves and at the same time inspires us to forgive to the others who are involved. Therefore, the inclusion of forgiveness to the ex-partner as a possible target of treatment may facilitate a construction of the other in a more integrated way and foster psychological adjustment. Implications for the study of understanding individual differences in post-breakup distress and personal growth are discussed.

### **Acknowledgments**

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## **Establishment of Quality of Work-Life Program**

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**Keywords:** quality of Work Life program, action research, EWON 2002

The Quality of Work-Life Program is one of the interventions in organizational change and development that concerns to the employee's welfare, personal happiness and subjective wellbeing. By increasing the dignity and well-being of all members in the organization, it is expected that the productivity and performance will be ultimately increased. The constructs used are from the European Foundation for the Improvement of Living and Working Condition (EWON, 2002) which aspects are namely health and well-being, job security, job satisfaction, competency development, and work and non-work life balance.

This research used action research design that lasted for around 3 years. A series of programs are designed in line with the objective of improving the Quality of Work-Life in a company. In the first year, cluster mapping activities were conducted as the base line data of the organization and the design of the Quality of Work-Life program. In the second and third years there were several interventions based on the organizational development and change management concept.

With the establishment and reformation of various systems, such as the career path system, remuneration system, talent management, EAP formation, and several trainings such as coaching and counseling training for supervisors and managers, designing the leadership training modules, assertiveness and time management training etc, it is expected that the management and all members of the organization are ready to apply and maintain Quality of work life within the organization.

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## **Dealing With Conflict: Reducing Goal Ambivalence Using the Best-Possible-Self Intervention**

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*Objective:* One of the flagship exercises in positive psychology is the best-possible-self (BPS) intervention, which has been repeatedly shown to increase happiness. Yet little is known about the underlying psychological mechanisms through which the exercise promotes positive affect.

*Method:* To investigate this issue, we randomized clusters of 188 psychology undergraduates to either write about their best possible future or their previous day. Participants reported goal ambivalence, positive future expectations, and positive affect before, immediately after, and one week after the intervention.

*Results:* Path analysis results indicate that the BPS intervention reduced goal ambivalence up to one week later. A post hoc moderation analysis revealed that the decrease was larger for participants with higher initial levels of ambivalence. Neither goal ambivalence, nor positive future expectations mediated the effect of the BPS intervention on positive affect in the week after the implementation.

*Conclusion:* The BPS intervention reduces goal ambivalence independent of its effect on positive affect. Future studies should look at the activation of positive, self-relevant thoughts as a more general mechanisms of change in happiness.

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## Supporting Mental Well-being in Old Age

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**Keywords:** mental wellbeing, positive ageing, strength-based approach

*Background:* Mental wellbeing in old age and means to support it is a key issue in ageing societies. Typically old age is described as a phase of diminishing functional capacity, diseases and vulnerability. There is a need for more positive perspective in old age, which emphasizes life-skills, strengths, resources and resilience. Knowledge on positive ageing and mental wellbeing in old age is facing growing interest. Old people themselves need knowledge and practical tools to enhance mental wellbeing in their daily life and especially in facing challenging life-situations.

*Aim:* Age Institute is promoting good ageing and, as a part of this aim, has launched information and tools on mental wellbeing based on positive psychology.

*Method:* Tools and techniques to enhance mental wellbeing have been developed in co-creation with old people. This paper gives three examples of the developed tools. In the Life Skills campaign, old people were asked to describe their individual skills that give them joy and strength. The Senior MindPack is a pack of 52 cards dealing with themes concerning mental wellbeing, such as gratitude, strengths, self-compassion, positive emotions and mindfulness. With each theme there are practical tips on how to implement these in daily life. The Bridge of Mental Wellbeing is a structured discussion group model with 10 different themes, such as meaning in life, values, empowering narratives, and the power of positive approach.

*Results:* Old people find these positive and strength-based perspectives and tools useful and empowering. Professionals have used these tools and found them easy to implement in different situations in elderly care.

*Conclusions:* Positive perspective on ageing is beneficial in society in general and for old people themselves. By applying positive psychology it is possible to develop tools which support old people living in different life situations.

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## Components of Happiness for Middle-aged Japanese

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**Keywords:** happiness, subjective well-being, content analysis

*Background:* Happiness has been studied mainly as subjective well-being in the field of psychology, which is composed of aspects such as satisfaction with life, satisfaction with important domains, positive affect, and low levels of negative affect [1]. However, it has been pointed out that there are cultural differences in how people perceive happiness. The purpose of this study was to identify constructs related to the perception of happiness in middle-aged Japanese through content analysis using text mining.

*Method:* We conducted an online questionnaire survey where 500 participants aged 30 to 59 years (mean age = 42.51,  $SD = 7.64$ ) were asked the following question: “What is happiness for you?” The text answer was divided into minimum unit of words and words with the same meaning were replaced with one word. KH Coder, a quantitative text analysis software, was used to process the data.

*Results:* A total of 1,437 words and 435 different words were extracted through morphological analysis. The frequency of appearances of some words in the answers were: *family* (121), *health* (69), *I/me* (30), *life* (28), *spend* (27), *time* (25), *spending* (21), *like* (20), *happy* (20), *quiet* (20), *money* (17), *child* (17), *person* (17), *smile* (16), *living* (16). Based on the results of a hierarchical cluster analysis performed using the Ward method for words appearing more than 10 times, we identified five clusters (Figure 1). Cluster 1, including the words *I/me*, *together*, *like*, and *person*, was named “comfortable relationship” and defined happiness as being with one’s favorite person. Cluster 2, including the words *live*, *quiet*, *spending*, *living*, *money*, *worry*, and *eat*, was named “minimum standard of living” and defined happiness as spending life in quiet without worry about poverty. Cluster 3, including the words *happy*, *child*, and *healthy*, was named “child’s happiness” and defined their child’s health and happiness. Cluster 4, including the words *spend*, *time*, and *fun*, was named “comfortable time” and defined happiness as spending fun time. Cluster 5, including the words *family*, *health*, *smile*, *fulfill*, and *work*, was named “satisfaction in family life and work” and defined happiness as being successful in business and family life.

*Conclusions:* As the construction of happiness for Japanese, the most important elements were family and health. The components were largely grouped into three; “relationship family” (child’s happiness / comfortable relationship / fulfill in family life and work), “minimum standard of living” and “fun time”.



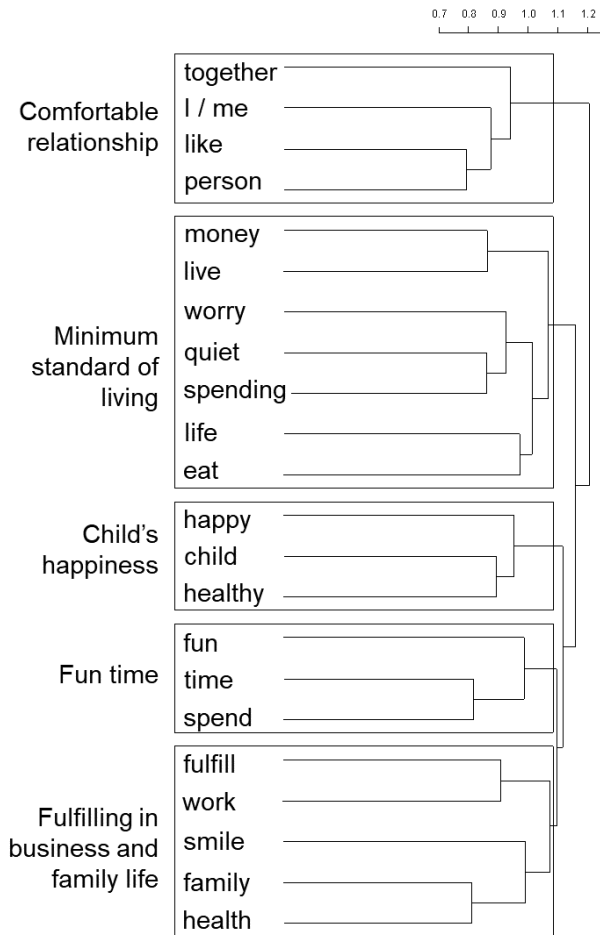


Figure 1. Five clusters identified using hierarchical cluster analysis.

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## Coping Strategy Represented in the Draw-a-Person-in-the-Rain Test by Japanese University Students

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**Keywords:** stress, coping, resilience, drawing test

*Background:* The Draw-a-Person-in-the-Rain Test (DPRT; Figure1; Hemmer, 1958) measures examinee's self-image and defense ability in stressful situations by their drawings of a person in the rain. This DPRT expresses conscious self-image, frustration and affection and is accepted as a suitable non-verbal self-expression. For this reason, this test is considered to be useful in assessing the features of the examinee's self-image and adjustment in stressful situations. The aim of this study was to consider that the relationship of the drawing characteristics would be projected during the test and the psychological scale concerning stress.

*Method:* The DPRT was conducted on 286 female university students. The tester instructed participants to "please draw one person (or yourself) in the rain" on an A4 size paper with a frame. Following this, we requested them to answer the Bidimensional Resilience Scale (Hirano, 2010) and Coping Measure Scale Based on a 3D-model (Kamimura, 1995). In the analysis, we classified the drawing characteristics as "Rain," "Umbrella," "Person," "Cloud," and "Other." Then, each drawing characteristic was determined with a t-test that provided a score difference by drawing or not.

*Results:* How one draws rain can be an indicator of how a person faces stress from its relation to the avoidant stress coping score [avoidant thinking](dotted line:  $t(265)=-2.20$ ), [leaving/desertion](dotted line : $t(265)=-2.09$ ; darkening:  $t(265)=-2.26$ ). The group who drew themselves with an umbrella that was not shielding them from the rain was considered to represent desertion and an avoidant tendency toward stress (rain) and had a low score [information gathering]( $t(265)=2.02$ ). The group that drew only a face were considered to have a defensive reaction of not confronting at all to stress and their negative coping score was high [avoidant thinking]( $t(265)=-2.53$ ) and [leaving/desertion]( $t(265)=-2.37$ ). Drawing clouds throughout the sky had a high score [passing the buck]( $t(264)=2.28$ ) and low score [self-understanding]( $t(176)=-2.22$ ), as it was considered to be an indicator that defense capability does not exert stress over the whole body. Additionally, drawing black clouds had a low score of negative stress coping [leaving/ desertion]( $t(265)=-2.08$ ) and a high score [problem solving]( $t(177)=-2.06$ ), because such drawings were considered to be representations of a conflict that the examinees could not solve even if they wanted to.

*Conclusions:* Over all, the DPRT has shown to be useful for assessing the degrees of recognition and coping with stress among students.



**Figure1.** The Draw-a-Person-in-the-Rain Test

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## Character Strengths and Cognitive Flexibility: Can Implicit Reflection ‘Broaden and Build’?

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**Keywords:** character strengths, cognitive flexibility, Broaden and Build

*Background:* The Broaden and Build (B&B) hypothesis [2] proposes beneficial relationships between positivity and cognition/behaviour. Positive Psychology research into character strengths [6] also highlights such benefits, frequently explored via interventions [5]. Cognitive flexibility [1] represents high-level cognitive abilities, associated with executive functions, potentially connecting with the enhanced thought-action repertoire of the B&B hypothesis.

*Aim:* Overall, we aimed to explore/substantiate relationships between character strengths and cognitive flexibility. Specifically, we predicted that implicit reflection on character strengths, via a card-sort task, would improve participants’ subsequent performance in cognitive flexibility tasks (compared to a control card-sort).

*Method:* The intervention condition (sorting strengths cards by personal relevance) encouraged participant reflection on character strengths, while control participants sorted playing cards into suits. Cognitive flexibility was measured in three ways. In Study 1, participants completed a Navon task [4]; in Study 2, this task was adapted to include reversed stimulus-response mapping. For Study 3, the Alternative Uses task [3] was undertaken. In addition to these tasks, participants completed a free-response questionnaire to collect subjective experience of both tasks.

*Results:* The findings support a general facilitation of cognitive flexibility in experimental groups (Study 1 [ $F(1,48) = 3.43, p = .07, \eta_p^2 = .06$ ]; Study 2 [ $F(1,43) = 5.94, p = .02, \eta_p^2 = .12$ ]; Study 3 [ $F(1,45) = 434.05, p = .01, \eta_p^2 = .12$ ], although effect sizes were low. Qualitative data also yielded themes indicating behavioural benefit (e.g., perceived increase in creativity). However, participants’ subjective reports highlighted the need for stronger, less generalized interventions to minimize negative self-evaluation or lack of engagement.

*Conclusions:* Overall, improved performance in cognitive flexibility tasks following implicit reflection on strengths was shown, suggesting some behavioural enhancement (as per the B&B hypothesis). However, subjective report data suggested that such interventions may require increased specificity.

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## A Reconsideration of the Passion Scale

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**Keywords:** passion, factor analysis, scale revision

*Background:* The Dualistic Model of Passion, developed by Vallerand et al(2003) [1], posits two distinct types of passion: harmonious and obsessive. Harmonious passion(HP) refers to an autonomous internalization that is related to the adaptive outcomes. Obsessive passion(OP) refers to a controlled autonomous internalization that is related to the maladaptive outcomes, such as rigid persistence and negative affect. There are two versions of the passion scale: the 14-item original passion scale developed by Vallerand et al(2003) and the 12-item passion scale revised by Marsh et al(2013) [2].

*Aim:* The purpose of this study is to reconsider the construct validity of the 14-item original passion scale.

*Method:* In Study 1, 275 American employees, recruited from Amazon Mturk, completed the original passion scale. In Study 2, 318 university students in Korea completed a Korean version of the passion scale. We conducted an explanatory factor analysis(EFA) and confirmatory factor analysis(CFA) to evaluate the construct validity of the original passion scale.

*Results:* In Study 1, EFA supported the two factors of the original passion scale. However, HP7 ('I am completely taken with this activity') was assigned to the OP dimension. CFA revealed that the revised model which assigned HP7 to OP showed a better fit than the original model. The same result was obtained in Study 2.

*Conclusions:* Results suggested that HP7 from the original passion scale is likely to reflect the properties of OP, rather than HP. We replicated this result in an Asian population, which implies the inappropriate assignment of HP7, regardless of cultural differences. More research is recommended to determine whether the result of this study could be replicated in other groups.

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This poster aims at answering which phases of the coaching process are experienced as important by coachees and how coachees categorize “chapters” of the coaching experience. Its qualitative method stems from the adapted Life Story Interview (McAdams, 2008), a relatively flexible method of data collection, which was adapted to the coaching experience. Semi-structured interviews with 18 managers of a large Czech bank were recorded and analyzed. The interviews were accompanied with coachees’ graphics. Whereas a lot of attention has been directed at different phases of the coaching process from the coaches’ point of view (e.g. Grant et al., 2010; Jenson, 2016), less attention has been dedicated to the coachees’ perspective. Stemming from our research, there are some considerable differences in how coachees look at the process. For example, instead of evaluating solely goal setting and attainment, coachees in our research talked about the level of energy they had or (positive) emotions they were experiencing.

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## Differences of Lay Theories Promoting Subjective Well-being

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**Keywords:** lay theory, emotional well-being, psychological well-being, cultural well-being, person-activity fit

*Background:* Research on the positive psychological intervention (PPI) increased rapidly [1]. However, relationships between the intervention and characteristics of target person had not always been considered sufficiently [2]. The appropriateness of the PPI might differ from each person. Especially, people have some lay theories about promoting subjective well-being (SWB). These lay theories might differ from the aspects of SWBs.

*Aim:* We conducted a web study on the ratings of six different SWBs aspects (emotional, psychological, engagement, social, environmental, and cultural). At the same time, participants were asked to answer their lay theory how they increase each aspects of SWBs by open-question. The aim of this study was to find the relationships between the scores of SWBs and the contents of open question descriptions.

*Method:* One-thousand and thirty subjects answered the SWBs scales and open-questions. Age cohorts were consisted from 20s to 60s, equality number of both sex. We showed the results of three SWBs in this report, emotional WB, psychological WB and cultural WB.

*Results:* Emotional WB (EWB) was measured by 10 items scale selected from PANAS [3]. Factor analysis revealed two factors, positive emotion and negative emotion. Correlation of both scores was -.42. Hedonic balance was calculated (positive – negative). Mean score of hedonic balance was -.11(ranged from -5 to 5). Psychological WB (PWB) was measured by 18 items selected from Ryff ‘s scale [4]. Five factors were found by factor analysis. Based on the correlation of these factors, we selected ‘meaning in life’ and ‘autonomy’ subfactors for our research ( $r=.45$ ). Sum of the two factors was calculated. Mean score was 3.74(1 to 6). Japanese cultural WB (JWB) was measured by 10 items scale (Minimalist happiness; Kan et al.,2009) [5]. Factor analysis showed two factors (gratitude and calm). Correlation with two factors were .32. Mean of summation scores was 4.03(1 to 6).

We selected around two-hundred subjects in each SWBs aspects respectively who showed high or low score of the each SWBs, and classified their open-end answers. The questions for open-ended description were as follows. 1) EWB: What do you need to do, or need to have mental set for making your life emotionally positive? 2) PWB: What do you need to do, or need to have mental set for understanding your life of meaning? 3) JWB: What do you need to do, or need to have mental set for keeping the spirit of Japanese? Table 1 showed the cross-table of contents of free description on EWB( $\chi^2(df=13) = 53.22, p.<.001$ ). The hedonic balance of the high-score group ranged from 1.8 to 4.4 ( $n=132$ ), and low-score group ranged from -2.0 to -4.8( $n=123$ ). Residual analysis showed significant difference of proportion on



five categories. High -score subjects described more ‘stay positive’, ‘make a fun’, and ‘become confident’. Low-score subjects replied more ‘I don’t know’.

The same analysis was conducted on PWB and JWB. Table 2. showed the result of PWB( $\chi_2(df=13) = 27.25, p.<.012$ ). The score of high group ranged from 5.0 to 5.83( $n=98$ ), low group range was 1.17 to 2.67( $n=121$ ). High-score subjects described ‘become confident’ more frequently. Low-score subjects answered again ‘I don’t know’. Table 3. showed the results of JWB ( $\chi_2(df=16) = 45.50, p.<.001$ ). High group range was 5.0 to 5.92( $n=117$ ), low group range was 1.08 to 3.08( $n=102$ ). High-score subjects set much value on ‘feel grateful’. Low-scores related to the non-commitment answer such as ‘I don’t know’ or ‘get out of mind’.

*Conclusions:* High-score subjects seemed to recognize their positive characteristics for each aspect. However, for promoting their SWB, multiple pathways were hypothesized individually as shown in the tables. In low-score subjects, the way to promoting well-being was not clear. It meant that PPI would be effective for these subjects. Another possible consideration was subject’s response style had an effect on the *Results:* However, the correlation between three SWBs were not so high  $\square$ EWB-PWB,  $r=.51$ ; EWB-JWB,  $r=.37$ , PWB-JWB,  $r=.08$   $\square$ . Then, overlapping of subjects may be small. In conclusion, we might be need to investigate the participant’s lay theory for thinking person-activity fit in PPI before beginning intervention.

**Table 1.** Contents of EWB

**Table 2.** Contents of PWB

**Table 3.** Contents of JWB

		ewb-H	ewb-L			pwb-H	pwb-L				JWB-H	JWB-L		
1	don't worry	23	24		1	introspection	21	23		1	keeping Japanese identity	6	3	
		17,4%	19,5%				21,4%	19,0%				5,1%	3,0%	
2	stay positive	30	14	H>L	2	stay positive	1	0		2	make a fun	6	1	
		22,7%	11,4%				1,0%	0,0%				5,1%	1,0%	
3	make a fun	17	6	H>L	3	well knowing	6	15		3	well knowing	9	2	
		12,9%	4,9%				6,1%	12,4%				7,7%	2,0%	
4	feel grateful	6	1		4	feel grateful	5	3		4	feel grateful	10	2	H>L
		4,5%	,8%				5,1%	2,5%				8,5%	2,0%	
5	become confident	18	5	H>L	5	become confident	6	0	H>L	5	become confident	2	3	
		13,6%	4,1%				6,1%	0,0%				1,7%	3,0%	
6	stay objective	3	2		6	keep healthy	1	1		6	ancestor worship	2	0	
		2,3%	1,6%				1,0%	,8%				1,7%	0,0%	
7	for what it is	4	1		7	for what it is	5	2		7	for what it is	9	4	
		3,0%	,8%				5,1%	1,7%				7,7%	4,0%	
8	lay out a goal	8	10		8	lay out a goal	11	9		8	set much value on freedom	4	1	
		6,1%	8,1%				11,2%	7,4%				3,4%	1,0%	

		ewb-H	ewb-L				pwb-H	pwb-L				JWB-H	JWB-L	
9	engage in hobby	11	6		9	affirma- tive action	8	6		9	political attitude	1	4	
		8,3%	4,9%				11,2%	7,4%				,9%	4,0%	
10	social sup- port	3	7		10	social support	7	14		10	compassion toward others	27	16	
		2,3%	5,7%				7,1%	11,6%				23,1%	15,8%	
11	keep healthy	2	7		11	get money	0	5	L>H	11	conscien- tiousness	3	1	
		1,5%	5,7%				0,0%	4,1%				2,6%	1,0%	
12	get money	0	1		12	others	10	12		12	traditional event	11	5	
		0,0%	,8%				10,2%	9,9%				9,4%	5,0%	
13	others	2	8	L>H	13	I don't know	10	27	L>H	13	othses	5	10	
		1,5%	6,5%				10,2%	22,3%				4,3%	9,9%	
14	I don't know	5	31	L>H	14	get out of my mind	7	4		14	ethnicity of Japan	7	10	
		3,8%	25,2%				7,1%	3,3%				6,0%	9,9%	
	total	132	123			total	98	121		15	spirits of Zen	2	0	
	range	1.8-4.4	-2.0-- 4.8			range	5.00- 5.83	1.17- 2.67				1,7%	0,0%	
										16	I don't know	13	35	L>H
												11,1%	34,7%	
										17	get out of mind	0	4	L>H
												0,0%	4,0%	
											total	117	102	
											range	5.00- 5.92	1.08- 3.08	

### Acknowledgments

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## **A Preliminary Study of the Moderating Effect of Emotion Regulation Difficulties on the Relationship between Proactive Personality and Flow**

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**Keywords:** emotion regulation difficulty, flow, positive psychology, proactive personality

*Background:* With rapid developments in communication technology, the ability to conquer information overload and maintain efficiency is the crucial issue for modern people. How to overcome the external disturbances and grasp the timing and good skills that can quickly lead us into the state of flow [1] is the focus of our research.

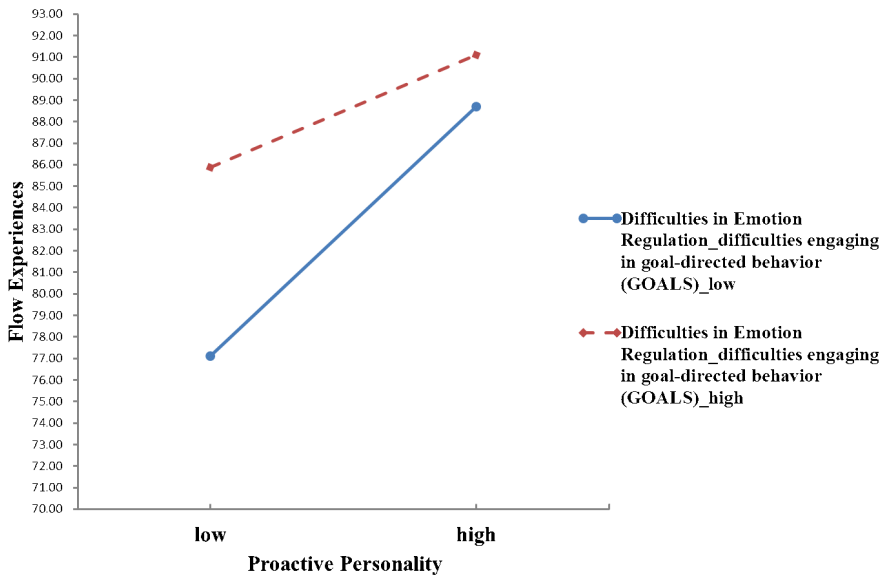
*Aim:* The main purpose of this study is to explore the moderating effect of emotion regulation difficulties on the relationship between proactive personality and flow.

*Method:* Data gathering from the self-reported online survey of 111 college students and the valid data were reported ( $N=75$ ). Participants gave informed consent and completed "proactive personality scale (PPS)", "difficulties in emotion regulation scale (DERS)" [2] and "flow experience questionnaire (FEQ)" [3]. The results were analyzed by using descriptive statistics, t-test, correlation, and hierarchical regression.

*Results:* The main findings reveal that there was a significant negative correlation between PPS and DERS ( $r = -.34, p < .01$ ), and significant positive correlation with FEQ ( $r = .43, p < .01$ ), which indicated that higher degrees of proactive personality can lead to fewer difficulties in emotion regulation. Meanwhile, proactive personality can also effectively predict flow experiences ( $\beta = .53, p < .001$ ). In addition, the relationship between DERS and FEQ is mainly manifested in three parts: (1) a significant negative correlation between "difficulties in emotional clarity" and "enjoyment in flow experiences" ( $r = -.28, p < .05$ ); (2) a significant positive correlation between "difficulties engaging in goal-directed behavior" and "exploration in flow experiences" ( $r = .24, p < .05$ ); (3) a significant positive correlation between "difficulties in impulse control" and "challenge in flow experiences" ( $r = .25, p < .05$ ). The above results show that some elements of negative emotions may have positive effects on the experiences of flow, of which "difficulties engaging in goal-directed behavior" can effectively predict flow experiences ( $\beta = .87, p < .05$ ). The interaction was significant through hierarchical regression analysis, and indicated that "difficulties engaging in goal-directed behavior" can modulate the relationship between proactive personality and flow experiences ( $\beta = .21, p < .05$ ). Results suggest that when the "difficulties engaging in goal-directed behavior" is low, proactive personality has a strong impact on the experiences of flow.

*Conclusions:* Emotion regulation difficulties may affect the relationship between proactive personality and flow, especially when people lose the ability to engage in goal-directed behavior while experiencing negative emotions. People with low ratings of proactive personality can experience the flow under proper negative emotions, but people with high proactive

personality need more positive emotion to experience flow. Some of the findings are in line with those reported in the existing personality literature; others, however, are surprising. Hence, we propose the following reflections on the promotion of positive psychology: Despite the importance, we should not over-emphasize the benefits from positive emotions. Mild bad moods may be useful under certain circumstances for people who are just not that active. Further research should focus on exploring the potential factors and validating the psychological mechanisms.



**Figure 1.** The Moderating Effect of the Difficulties in Emotion Regulation on the Relationship between Proactive Personality and Flow Experiences

## Acknowledgments

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## **Intrapersonal Valued Goals and Meaningful Facets: Alignment Patterns and Associations with Sociodemographic Variables and Well-being Indicators in a South African Group**

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**Keywords:** goals, meaning, intrapersonal, sociodemographic, well-being measures

*Background:* It is known that concordance between goals and what is experienced as meaningful is associated with higher levels of well-being in general. However, it is not known how various patterns of such an alignment are manifested specifically on an intrapersonal level. Patterns of alignment are described in this study as no-goal-no-meaning, both-goal-and-meaning, only-goal-no-meaning, and only-meaning-no-goal.

*Aim:* The aim of this study was to explore the patterns of alignment of valued goals and meaningful things on an intrapersonal level in association with sociodemographic variables and indicators of well-being.

*Method:* Quantitative and qualitative data was concurrently collected cross-sectionally in a mixed methods convergent parallel design. Implementing the coding categories developed by Delle Fave et al. (2011) the qualitative data were transformed to quantitative data. The codes referring to intrapersonal psychological processes were further analyzed. South African participants (N=585) of at least 18 years old and high school educational level took part. Measures included 1) a Socio-demographic questionnaire collecting data on gender, age, education, marital status, standard of living, language and religion; Mental Health Continuum – Short Form (MHC-SF); Satisfaction with Life Scale (SWLS); Positive-Negative Affect Schedule (PANAS); Meaning in Life Questionnaire (MLQ); Semi-structured open-ended questions on important goals and meaning. Associations among variables were explored with one- and two-way ANOVA's.

*Results:* Across all categories of sociodemographic variables there was a very high concordance between valued goals and meaningful experiences on an intrapersonal level, especially for the younger age group, those with postgraduate education, divorced/separated and single groups, and the Afrikaans speaking group. Significant interactions among patterns of alignment, sociodemographic variables and well-being as measured with the SWLS, MHC-SF, PANAS and MLQ were found with different interpretations being suggested by the SWLS and MHC-SF in some regards.

*Conclusions:* Our findings indicate that there is great harmony between valued goals and meaning on an intrapersonal level in ordinary people. Further research need to establish what the case will be for people suffering from various forms of psychopathology, and whether the present findings on associations can be verified in other countries. This study showed that the choice of measures to explore the association of congruence patterns with well-being is an important matter and need to be studied further.

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## The Use of a Reflective Diary to Improve Resilience, Well-being and Motivational Persistence

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**Keywords:** resilience, motivation, workplace well-being

*Background:* Rising figures for individuals who suffer from mental health disorders at work<sup>[1]</sup> and the rising costs of these disorders<sup>[3]</sup>, has led to UK Government initiatives<sup>[4]</sup> which aim to equip employers with tools to support individuals in work. However, these initiatives have also highlighted a need for the development of evidence-based early interventions to support individuals in work to thrive<sup>[5]</sup>. Positive Psychology Interventions (PPIs) are ideal manifestations of these strategies, as they are cost-effective, light-touch and targeted at individuals with the greatest need. Previously, research has implemented a work reflection diary, finding an increase in affective well-being<sup>[6]</sup>. Furthermore, a recent literature review reported that PPIs improved employee well-being and performance<sup>[7]</sup>, with improvements in wellbeing similar to those observed from more traditional therapy interventions<sup>[8]</sup> (e.g. CBT).

*Aim:* Current research focused on evaluating a light-touch reflective diary intervention to promote resilience and motivation. Two diaries were implemented, which identified potential challenges to goal achievement, and focused on negative (study 1) and positive (study 2) affective components to perceived barriers.

*Method:* Over the course of 7 days, participants (Psychology students, completing for course credit) were asked to engage with a diary, specifically designed to focus on goal-setting and building resilience. In both studies, participants were brought into the lab on 3 occasions (pre-, 1-week post-test and 1-month follow-up) and asked to fill-in a variety of wellbeing, motivation and resilience measures. Between pre- and 1-week post-test, participants were given either an anxiety diary (study 1) or an excitement diary (study 2) to engage with for 7 days.

*Results:* In study 1, planned contrasts revealed that the anxiety diary had a detrimental effect on participants; resilience significantly decreased from post-test to follow-up, and the diary had no overall effect on motivation. However, in study 2, a series of 3x2 mixed measures ANOVAs revealed a significant interaction between time (pre-, post- & follow-up) and condition (excitement vs first 3 things) for participants' intrinsic motivation. Furthermore, planned contrasts further revealed a significant difference in the experimental condition over time (pre-test to post-test) and a significant difference between conditions at post-test. Planned contrasts further revealed a significant increase in resilience in the experimental condition over time (pre-test to post-test). No significant differences were found in the control condition.

*Conclusions:* Results indicated that negative framing has adverse consequences on well-being, whereas positive framing leads to short-term gains. These findings add to research: (a) aiming to define resilience<sup>[9]</sup>, (b) which develops interventions to promote workplace health, (c) increasing knowledge on the two-factor theory of emotion model<sup>[10]</sup>.

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## Optimism and Well-being in Adolescents: A Validation Study of the Dutch Version of the Life Orientation Test-Revised

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**Keywords:** psychometric properties, optimism, well-being, adolescent

*Background:* Optimism, defined as the generalized expectation that good things will happen, is predictive of mental and physical well-being in adults [1]. However, less research is available studying optimism and mental health in adolescents, partly because a valid instrument to assess optimism in this age group is lacking.

*Aim:* The Life-Orientation Test-revised (LOT-R), a self-report questionnaire assessing optimism, has been validated in adults [2], but a psychometric study of an adolescent version is missing. Therefore, the objective of this study was to validate the LOT-R in a sample of healthy Dutch speaking adolescents. Reliability, convergent validity, divergent validity and predictive validity were examined.

*Method:* Two lifespan psychologists adapted the adult version of the LOT-R for use in adolescents. Additionally, 3 adolescents evaluated the adapted LOT-R. Incomprehensible and difficult items were adjusted accordingly. In the validation study, 467 adolescents completed the LOT-R-A, the MHC-SF-A, measuring mental health [3], the psychological well-being subscale of the KIDSCREEN-52 and the SDQ, measuring psychopathology. At four-week follow up, 281 adolescents (60% response rate,  $M_{\text{age}} = 14.34$ ,  $SD_{\text{age}} = 1.97$ ; 61.9% girls,) completed the LOT-R-A, the MHC-SF-A [3], the KIDSCREEN-52 and the SDQ. The internal consistency was assessed by Cronbach's alpha coefficient. Correlation analyses were used to inspect test-retest reliability, convergent validity and divergent validity. Regression analysis with mental health at follow-up as dependent variable, optimism (at baseline) and mental health at baseline as independent variables and corrected for sex, age and level of education was performed to examine the predictive validity.

*Results:* The internal consistency of the LOT-R-A was satisfactory ( $\alpha = 0.72$ ). Results revealed good test-retest reliability ( $r = 0.61$ ,  $p < 0.01$ ). Correlation analyses showed a significant positive association with psychological well-being ( $r = 0.57$ ,  $p < 0.01$ ) and a significant negative correlation with the SDQ ( $r = -0.54$ ,  $p < 0.01$ ). In addition, optimism was found to be predictive of mental health ( $\beta = 0.12$ ,  $p < 0.01$ ).

*Conclusions:* The results support the validity of the LOT-R-A for use in adolescents. Furthermore, it was shown that optimism is predictive of mental well-being in adolescents.



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## Positive Psychological Assessment for the Workplace

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**Keywords:** positive assessment, workplace assessment, positive psychological assessment

*Background:* Research stemming from the fields of Positive Organizational Scholarship and Positive Organizational Behavior has demonstrated that work wellbeing is good for the individual, the organization, and for society as a whole. Such findings are driving organizations to investigate and then further invest in Workplace Wellbeing Programs (WWP's). As such it is important to know how organizations implementing WWP's assess the wellbeing of employees, and how they evaluate the WWP's they implement in relation to their impacts on employee wellbeing and important organizational performance indicators. However, there is no critical review or study of organizational wellbeing assessment practice presently available.

*Aim:* The aim of this research was to review and appraise current workplace wellbeing assessment practices, drawing on various related literature. In other words, what do current workplace wellbeing assessment practices look like? Based on this review we aimed to provide suggestions as to both what should be assessed in organizations, and how this should be assessed.

*Method:* We investigated what positive psychological and wellbeing assessment measures are used in 1) wellbeing promotion research, 2) what measures are used in workplace wellbeing research, and 3) what measures are suggested by positive psychological assessment experts. With promotion research we explored the assessment measures used in 40 effectiveness trials further, and this highlighted both which assessment measures, and to what extent the measures, are used in positive psychology intervention effectiveness trials. For measures used in workplace wellbeing research we conducted a systematic review to investigate which positive psychological measures are used to evaluate the effectiveness of a workplace wellbeing intervention. Lastly, we investigated what measures were recommended by positive psychology experts in literature.

*Results:* In the promotion research, across 40 effectiveness trials 34 measures (e.g., Satisfaction with Life Scale, Scales of Psychological Wellbeing) were used to capture 17 constructs (e.g., Positive affect and negative affect, wellbeing), however only six were used four or more times. The workplace wellbeing research identified 56 studies that utilised 111 measures, with 8 used four or more times across the 56 studies. Experts (i.e., Owens, Magyer-Moe, & Lopez, 2015) identified 58 specific measures. Across all of this information many of the measures that were used were not traditional 'positive measures', nor assess 'positive variables', but rather measured clinical type variables (e.g., depression, anxiety, stress), or health variables.

*Conclusions:* Whilst there is a lack of rigor in current assessment practices, we suggest, based on the above review, 11 measures as likely good candidates for potential use in positive psychological assessment practices in workplaces.

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## Humor and its Relationships with Vitality and Flourishing for Iraqi College Students

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**Keywords:** humor, vitality, flourishing, mediator, Iraqi students

*Background:* The expression "sense of humor" refers to a personality characteristics aimed at describing habitual individual differences in humor-related thoughts, feelings, and action n (W. F. Ruch, 2012). The sense of humor composes two concepts: The corrective and the benevolent humor. Benevolent humor refers to a humorous outlook on life entailing the realistic observations and understanding of human weaknesses and the imperfection of the world but also its acceptance and a non-critical and benevolent humorous treatment.

Corrective humor involves moral-based ridicule; that is the use of mockery to fight badness and mediocrity. It uses wit to ridicule vices, follies, abuses, and shortcomings with the intent of shaming individuals and groups into improvement. Both concepts have their origin in humanism as described above. In Iraqi culture, little information has been found about the sense of humor.

*Aim:* The objective of the first study was to examine the factorial structure and reliability of the Arabic version of sense of humor scale (W. F. Ruch, 1998). It composes of 12 items: 6 for corrective and 6 for benevolent humor. The objectives of the second study were (i) to test if subjective vitality could be mediator variable in the relationships between corrective, benevolent humor and flourishing and (ii) to test if sex has an impact on corrective and benevolent humor.

*Method:*

Participants and procedure

Data were collected from Iraqi population on Baghdad ( $n = 293$ ;  $n = 307$ ). They aged from 17 to 38 ( $M = 21.01$ ;  $SD = 2.74$ ). Men were 48.3% and women were 51.7%. First author informed participants about the objective of the study and that their participation was voluntary and they could withdraw at any time. Both oral and written instructions were given regarding items understanding (*i.e.*, that there were no right or wrong answers to the questions and they should freely state what they think) and they were reassured about the confidentiality of their responses. SPSS 22 was used to perform the internal consistency (Cronbach alpha), t test and ANOVA. LISREL 8.7 was used to test the confirmatory factor analyses (CFA).

*Measures:*

**Statements of benevolent and corrective Humor** (W. Ruch & Heintz, 2016). It composes of 12 items, item 1-6 item are measuring the corrective humor and 7-12 measuring the benevolent humor. They were answered on a seven-point Likert scale ranging from 1 (strongly

disagree) to 7 (strongly agree). Item translation followed the standard guidelines of translation and back-translation procedures (Banville, Desrosiers, & Genet-Volet, 2000). For the Arabic version, second author has followed the last procedures.

**Subjective Vitality Scale (SVS).** The concept of subjective vitality refers to the state of feeling alive and alert to having energy available to the self (Ryan & Frederick, 1997). The SVS is a short instrument to measure vitality. A 7-point Likert scale was used ranging from “strongly disagree” (1) to “strongly agree” (7). In this study, we used the short version that consists of 6 items and purpose to evaluate the individual difference level. It has been translated and used in Arab countries (Marei Salama-Younes, 2011; Marei Salama-Younes & Hashim, 2017).

**Psychological Flourishing Scale (PFS)** (Diener et al., 2010). The Flourishing scale is a brief 8-item summary measure of the respondent's self-perceived success in important areas such as relationships, self-esteem, purpose, and optimism. The scale provides a single psychological well-being score. A 7-point Likert scale was used ranging from “strongly disagree” (1) to “strongly agree” (7). It has been translated and used in Arab countries (Marei Salama-Younes, 2017).

*Results:*

*Study 1.* CFA and internal consistency show that two items must be deleted. There were the item 6 and item 7. The CFA confirms the bi-dimensionality of scale (corrective and benevolent humor). The goodness of fit indexes was acceptable in terms of  $\chi^2/df$  ratio, NFI, GFI, CFI, RMR and RMSEA. In addition, Cronbach alpha for the two factors and total score was good (0.70-0.76). The scale became only 10 items which has good psychometric properties.

*Study 2.* The hypothesis of model stated that vitality should mediate the relation between corrective, benevolent humor and flourishing. The correlation matrix served as the database for the path analysis and the method of estimation was maximum likelihood. All the path analyses conducted in the present research were performed with SIMPLIS project. The path analysis revealed that vitality should mediate the relation between corrective, benevolent humor and flourishing. The goodness of fit indexes was acceptable in terms of  $\chi^2/df$  ratio, NFI, GFI, CFI, RMR and RMSEA. In addition, T-test was performed in order to test if sex has an effect on corrective and benevolent humor. Result indicated that women ( $N=164$ ) have higher score than men ( $N=143$ ) in only corrective humor. Women had higher score  $M=4.46$  ( $SD=0.76$ ) compared to men  $M=4.41$  ( $SD=0.87$ ). However, there was no significant difference on benevolent humor.

*Conclusion:* The Arabic version of the scale composes of only 10 items. Two items have been deleted from the original one. The CFA confirm the bi-dimensionality of scale (corrective and benevolent humor). Cronbach alpha for the two factors and total score was good. Subjective vitality mediates the relation between both corrective and benevolent humor and flourishing. T-test indicated that women have higher score than men in only corrective humor.

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## Loneliness in Children with Behavioral Characteristics of Hyperkinetic Disorder

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**Keywords:** loneliness, hyperkinetic disorder, hyperactivity, inattention

*Background:* An increased number of children have been diagnosed with hyperkinetic disorder in the last few decades [1]. Although contemporary research focus on pharmacology and biological etiology of hyperkinetic disorder, it is important to acknowledge psychological aspects of this developmental issue as well. Peer relations and acceptance are important for child's development. Children exhibiting these behavioral problems may be friendly toward others, but they often have communication problems and lack social skills. When interacting with peers, they often unintentionally make many mistakes [2]. All this could lead to peer rejection, and result in intense feeling of loneliness [3].

*Aim:* This study aimed to examine differences in loneliness between children who manifest problems related to hyperkinetic disorder and those who do not. Those who manifest behavioral problems were divided into three groups: mainly hyperactive children, mainly inattentive children and the combined type (both hyperactive and inattention problems).

*Method:* The sample consisted of 869 3<sup>rd</sup> and 4<sup>th</sup> grade elementary school students from Serbia, and their teachers. Behavioral problems related to hyperkinetic disorder were reported by teachers and measured by IVJER scale. This scale consists of behavioral indicators of hyperactivity and inattention, and pervasiveness of the presented symptoms. Loneliness was measured by self-report, using modified Asher's Scale.

*Results:* The results show there is a significant difference between children who have behaviours characteristic of hyperkinetic disorder and children who do not. Children who manifest these behavioral problems experience more loneliness. Differences in loneliness were found between subtypes of hyperkinetic disorder: children with problems with inattention and combined inattention and hyperactivity experience more loneliness than children with only hyperactive symptoms. There are no significant differences between children with no problems and with hyperactive symptoms. There is no significant difference in loneliness between children who manifest inattention problems and problems of both inattention and hyperactivity.

*Conclusions:* Loneliness in childhood has a great negative impact on child's well being [4]. It is therefore of great importance to recognize and identify vulnerable groups. Our results imply that it is not hyperactivity, but rather inattention problems that contribute to loneliness. Further research should focus on relations between loneliness and inattention, and pathways in which inability to engage in social interactions and the lack of awareness to social cues in children with inattention problems may lead to loneliness.

### **Acknowledgments**

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## The Relationship between Meaning of Work and Subjective Well-being: Mediating Effect of Meaning in Life

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**Keywords:** meaning of work, mean in life, subjective well-being, mediation effect

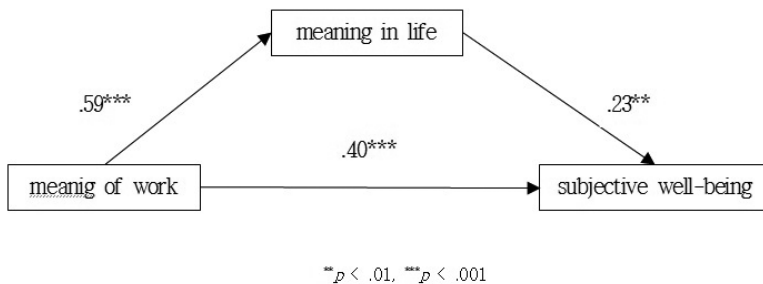
*Background:* Korea is the first rank of working hour in OECD[1]. Also Korean middle aged people spend the most of their lives in work. However People want the work is not only as an economic means, but it has meaning[2]. The Meaning of work, which is the belief, significance and purpose that individual has subjectively in their work, was reported major factor that effects the well-being[3]. To further advance study, the authors propose meaning of work can enhance meaning in life[4]. Also one important aspect of well-being is perceived meaning in life[5]. Therefore, our interest in meaning in life as a factor that may explain the relation between meaning of work and well-being was threefold.

*Aim:* The aim of this study investigated the relationship between meaning of Work and Subjective Well-being in Korean middle aged.

*Method:* 78 male and 93 female of middle aged were participated. The data were collected using Working As Meaning Inventory(WAMI), Meaning in Life Questionnaire(MLQ), and Concise Measure of Subjective Well-Being(COMOSWB). These variables were collected by questionnaire method.

*Results:* The results can be summarized as followings. First, meaning of work was positively correlated with meaning in life and subjective well-being. And meaning in life was also positively correlated with subjective well-being. Second, the meaning in life was partial mediation between meaning of work and subjective well-being. The middle aged's higher score of meaning of work not only directly increased subjective well-being, but also induced higher level of meaning in life, which, in turn, increased subjective well-being.

*Conclusions:* The results suggested that meaning in life can be important factor of the relationship between meaning of work and subjective well-being.



**Figure 1.** Path analysis about relationships between meaning of work and happiness.

### **Acknowledgments**

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## **The Benefits of Calling at Work: Implications for Leader-Member Exchange (LMX) and Psychological Well-being**

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**Keywords:** calling, leader-member exchange, job satisfaction, life satisfaction

*Background:* Recent research in the positive psychology literature has begun to examine the role of calling in work settings. Calling which refers to an orientation toward work [1] has emerged as an important contributor to enhance work and general well-being. Several studies have investigated the effects of calling on well-being; however, only few studies have investigated the reason why a sense of calling improves employees' psychological well-being.

Based on theory, employees who have a calling are intrinsically motivated and focus on personal fulfillment and meaningfulness of work [1]. Given this focus, those with calling may tend to frequently seek feedback from supervisor in order to improve their skills and performance, and subordinates' feedback seeking may help developing and maintaining close relationships with supervisors [2].

Furthermore, employees in high-quality LMX relationships receive preferential treatments such as emotional support and trust [3]. These benefits for high-quality LMX are likely to be associated with positive outcomes: previous studies found LMX is related to elevated job satisfaction and well-being. [4].

*Aim:* The goal of this study is to explore the relationship of calling to job and life satisfaction, and to evaluate LMX as a mediator of this relation.

*Method:* To test our study model, data were gathered from 229 employees in the United States and were analyzed using the PROCESS macro [5] to test the mediating role of LMX in the relationship between calling and psychological well-being.

*Results:* As results, LMX partially mediated the link between calling and life satisfaction as well as the link between calling and job satisfaction. That is, employees with high calling were more likely to experience high quality of LMX, which in turn heightened well-being.

*Conclusions:* This study enriches the calling literature by focusing on interpersonal context such as LMX which is likely to elucidate the mechanism underlying the relationship between calling and psychological well-being.

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## Quality of Life in Adults with Type 2 diabetes in Poland a Systematic Review

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**Keywords:** type 2 diabetes, quality of life, adult, Poland

*Background:* The number of people suffering from type 2 diabetes has been growing recently. This chronic disease is connected with lower perceived quality of life and experiencing a lot of stressful situations. According to International Diabetes Federation [1], there were 2.2 million patients with diagnosis in Poland in 2015. About 847 500 was undiagnosed yet. Monitoring the quality of life of diabetic patients was an issue proposed in the St. Vincent Declaration in 1989 [2].

*Aim:* Poster presents the results of a systematic review of the literature on research on the quality of life in group with type 2 diabetes in Poland, which were published by January 2018.

*Method:* The review was carried out in accordance with the PRISMA procedure [3]. After conducting a literature search in electronic databases (Medline, PsycInfo, PsycArticles, ERIC, Google Scholar) and following a selection process, we provide a summary of the main findings of 36 scientific papers published by January 2018.

*Results:* The quality of life of people with type 2 diabetes in Poland is lower than in the general population. Both sociodemographic and psychological factors are important for its level. Research is conducted in mixed age groups

*Cocnclusion:* This systematic review of the literature on the quality of life of adult people with type 2 diabetes in Poland is the first. An important aim for future research is systematization of results in development periods separately.

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## Promoting Creativity through an Empirically-Based Thinking Skill: Enjoying the Beauty of Opposites

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Positive psychology and creativity are inextricably related. Creative thinking helps us enjoy the beauty of this colorful world and lead us to increased well-being. This study aimed to examine how combining two opposite, near-opposite, and irrelevant concepts influence creative thinking and to present ideas of designing theoretically based activities for fostering creativity. One hundred and seventy-three college students from Taiwan participated in this experimental study, a portion of a large research project. A one-way repeated-measures ANOVA was used to investigate whether there was a difference in participants' responses to the stimuli of the two-antonym combination, the two near-antonym combination, and the two-irrelevant-word combination. The dependent variables were fluency and originality scores. The independent variable was antonymy. There were three levels of the antonymous relation: a. high (two antonyms), b. medium (two near antonyms), and c. low (two irrelevant words). The instrument contained three types of sentence completion, which form a triad.

EXAMPLE:

- a. \_\_\_\_\_ is optimistic and pessimistic because \_\_\_\_\_.
- b. \_\_\_\_\_ is optimistic and doubtful because \_\_\_\_\_.
- c. \_\_\_\_\_ is optimistic and fierce because \_\_\_\_\_.

There were a total of nine triads in the instrument. The three types of sentence completion were randomly arranged in each triad to resolve the problem of sequence effect. Participants are required to fill in the blanks and their answers need to reflect the meaning of the two underlined adjectives in the sentences. During their participation, they were instructed to make their answers as novel as possible. The results demonstrated that the participants' fluency and originality scores became significantly higher as the level of antonymy of the stimulus word pair increased. The results were discussed in the context of the existing literature and the implications about teaching for creativity were also provided.

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## Self-variable Belief as a Factor Predicting Well-being

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**Keywords:** self-variable belief, well-being, self-efficacy, depression

*Background:* "Self-variable belief" is a belief about "whether or not one's own ability changes," and similar concepts include "belief about intelligence," which is a belief about the variability of intelligence. According to Dweck (2006), the degree of depression increases with the belief that "intelligence does not change." Therefore, even in the case of self-variable belief, this belief is considered to have a possibility of adversely affecting mental health when it is low. A "self-variable belief scale" measuring this belief was prepared by Kasahara et al. (2017), and the relationship between mental health was studied. This study confirmed a negative correlation between self-variable belief and mental health.

*Aim:* In this research, we aimed to examine whether self-variable belief can predict well-being.

*Method:* We conducted surveys in July and October of 2017. We conducted a questionnaire survey twice for students of a private high school in Tokyo. We obtained responses from 279 people at the July survey and 278 people at the October survey. The composition of the questionnaire was as follows: [1] Self-variable belief: Self-variable belief (Kasahara et al., 2017), which consists of the "fixed factor" score (4 items) and the "variable factor" score (3 items); [2] Self-efficacy: Japanese version of general self-efficacy (Ito et al., 2005), which consists 10 items; and [3] Depression: Barulson Depression Scale for Children (Murata et al., 1996), which consists 18 items.

*Results:* As a result of examining the correlation of each variable, a negative correlation was found between the "fixed factor" and "variable factor" of self-variable belief ( $r = -.36$ ,  $p < .01$ ). A significant result was observed for "fixed factor" and depression ( $r = .30$ ,  $p < .01$ ), "variable factor" and self-efficacy ( $r = .38$ ,  $p < .01$ ), and "variable factor" and depression ( $r = -.33$ ,  $p < .01$ ). Next, as a result of examining the cross delay effect model, the model in Figure 1 was shown in each of the "fixed factor" and the "variable factor." The model fitness factor was "fixed factor" CFI = .99, RMSEA = .10. The values for the "variable factor" were CFI = .87 and RMSEA = .36.

*Conclusions:* Among the two factors of self-variable belief, it has been shown that the "fixed factor" predicts depression ( $\beta = .13$ ,  $p < .01$ ), and the "variable factor" predicts self-efficacy ( $\beta = .22$ ,  $p < .001$ ). From here, it was shown that the fixed beliefs and the variable beliefs have different functions. To maintain well-being, intervening in the belief that "the self will not be able to change" may be useful. To promote well-being, intervening in the belief that "the self will be able to change" may also be useful. In the future, qualitative studies such as interviews are desired for such change processes of fixed/variable beliefs.

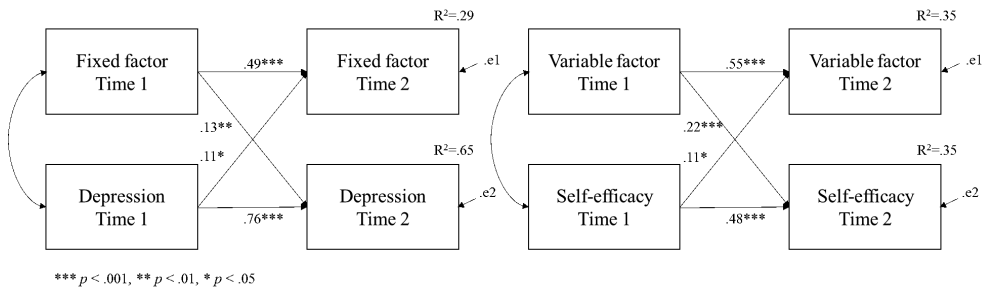


Figure 1.

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## Moved by Emotions: How Emotional Life Events Influence Where we Move

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**Keywords:** emotional life events, embodied cognition, abstract concepts, basic research

*Background:* To leave something negative behind, to move on after a negative experience, to look forward to something positive. When speaking about abstract concepts like valence, spatial metaphors are often used. This association shows a strong link between valence and space or respectively movements through space [1, 2]. Specifically, forward movements are more associated with positive valence, whereas backward movements are commonly associated with negative valence [3]. But are these associations strong enough to influence our movement patterns?

*Aim:* In the present study, we investigated whether emotional life events influence our decision on where to move.

*Method:* 71 participants reported 6 positive and 6 negative personal life events (e.g., graduation, unemployment). These life events were used as emotional stimuli that were presented on a screen during the experiment. As reaction to these stimuli participants had to move from the middle of a square sensor mat to that position on the mat, that they associated with the life event. There were 8 possible directions where participants could move (i.e., left or right, forward or backward, and diagonal).

*Results:* As expected, the results showed that positive life events are more likely to be associated with forward movements than the negative life events. Vice versa, negative life events are more likely to be associated with backward movements than the positive life events.

*Conclusions:* As suggested by this experimental setting emotions are not only associated with space but more important, they can also influence our decisions on where to move.

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## Qualitative Study of Happiness in East Asia

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**Keywords:** happiness, East Asia, cultural differences

*Background:* In studying cultural differences in happiness, it is necessary to clarify qualitative differences and commonality of happiness in each country and culture (Uchida, 2013). At present, however, many studies have measured the degree of happiness in quantitative surveys based on economic level as an indicator. Happiness can be prescribed by various factors such as the culture, environment, and values of each country. In the measurement of happiness using a quantitative scale, it is difficult to address cultural backgrounds and transformation of values, and there is a limitation.

*Aim:* Therefore, with a view to the basis of quantitative study, this study aimed is to qualitatively examine the cultural differences in happiness in East Asia, targeting Japan, China, and Taiwan. It will also examine the values that have changed since immigration to Japan subject to Chinese and Taiwanese citizenship.

*Method:* Research collaborators covered three women: one Chinese woman studying in Japan, one Taiwanese woman, and one Japanese woman living in Japan. They were aged 19, 27, and 24 years old, respectively. As a survey procedure, based on the focus group interview method, about 1 hour of group discussion was carried out about themes such as factors constituting happiness, cultural differences in happiness, and changes in values. For the obtained data, categories were generated, and models were created with reference to the GTA method.

*Results:* In Japan, finally, five categories of 'Women's happiness deadline', 'Happiness of maintaining the status quo', 'Value of happiness affected by the environment', 'Happiness of relationship', 'Safety happiness' were generated. In China, five categories of 'Happiness of family love', 'Ability-oriented happiness', 'Realistic happiness', 'Happiness of relationship', and 'Happiness of love' were generated. In Taiwan, six categories of 'Proactive happiness', 'Happiness of relationship', 'Balanced happiness', 'Acceptable of values', 'Individualist happiness', and 'Safety happiness' were generated.

*Conclusions:* From the model diagram, in Japan, guaranteed safety, assumed maintenance of the current situation, and characteristics that show happiness in a friendly relationship with others were shown. In China's happiness, economic allowance was born in depending on individual ability; it was supported that many things can be acquired with value. However, being influenced by the Japanese environment, the Chinese participant began to find happiness in a friendly relationship with others. In Taiwan's happiness, for permitting many values, a feature that causes various actions according to the situation was shown. Additionally, being influenced by the Japanese environment, the aspect of finding happiness in a friendly relationship with others increased.

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## The Relationship between Fear of Happiness and Emotion Regulation Difficulties in Social Anxiety

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**Keywords:** social anxiety, fear of happiness, emotion regulation, well-being

*Background:* Difficulties in emotion regulation are characteristic of individuals suffering from anxiety disorders [1]. In social anxiety, those difficulties specifically manifest as an intense fear of humiliation and embarrassment in social situations [2]. This disorder has also been shown to make people feel angry rather than happy and relaxed in everyday life [3]. A common idea might be that most people are looking for happiness whereas a previous study demonstrated that some people are afraid of happiness because they believe it might have negative consequences [4].

*Aim:* The aim of the study was to assess whether there is a relationship between difficult emotion-regulation capacities and the fear of experiencing happiness among individuals suffering from social anxiety.

*Method:* Twenty-five participants with moderate social anxiety were asked to complete online questionnaires assessing their level of emotion regulations difficulties and fear of happiness.

*Results:* Results showed that there was a significant positive correlation between difficulty in emotion regulation and fear of happiness in individuals suffering from moderate social anxiety.

*Conclusions:* Research indicate that, for people with moderate social anxiety, the greater the fear of happiness is, the more they have difficulties in regulating their emotions. As Barbara Fredrickson demonstrated, when people experience positive emotions, they have greater chances of feeling better in the future [5]. However if people with social anxiety shun away from happiness because of fear then they not only deepen their lack of control over their emotions but they might also jeopardize their chances of improving their well-being in the long term, causing a vicious circle.

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## Social, Emotional and Intercultural Learning Programs for Students and Schools Staff: A Review

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**Keywords:** social, emotional, intercultural competencies, EU

*Background:* Students' enhanced social, emotional and intercultural (SEI) competencies can result in several positive outcomes: better educational outcomes, better mental health, decreased numbers of early school leavers, improvement in prosocial behavior, decrease of physical aggression, positive self-image [1,2] and on the other hand enhanced SEI competencies among school staff are of vital importance for the development of student' social and emotional competences [3], for students' behavioral and academic achievement as well as for teachers' own well-being. The positive outcomes on individual and school level are dependent on the quality of the SEI programs as well as quality of implementation [4]. The quality of SEI programs is a topic of our study.

*Aim:* We will present the first outcomes of a collaborative EU based policy experimentation project: *HAND in HAND: Social and Emotional Skills for Tolerant and Non-Discriminative Societies (A Whole School Approach)*. The HAND in HAND project will create and apply an innovative HAND in HAND program for SEI competencies development for students and school staff that will be tested using experimental design with control group across 4 EU countries (Slovenia, Croatia, Germany, Sweden). In order to build upon the exiting knowledge we firstly focused on the review of existing SEI programs for students and SEI programs for school staff. The focus on the review was on international part as well as on national parts bringing EU perspective into focus.

*Method:* Each catalogue consists of international part (based on literature review) and national parts (based on a national review in Slovenia, Croatia, Sweden, Germany, Denmark).

*Results:* The international part of the HAND in HAND catalogue for school staff includes descriptions of 35 international programmes. The national part of SEI programs for school staff catalogues, prepared by partners from each participating country, contains a summary of the SEI programmes or good practices in the SEI field, as well as descriptions of selected programmes (29 altogether, 3-11 per country). The international part of the HAND in HAND catalogue for students' programme includes descriptions of 26 international programmes, of

which 17 are focused on social-emotional competencies and 9 on intercultural competencies. The national part, prepared by partners from each country, contains a summary of SEI programmes for students or good practices in the SEI field, as well as descriptions of selected programmes (26 altogether, 3-11 per country).

*Conclusions:* This study brings a meaningful contribution in analysing SEI programs, especially with emphasizing EU perspective. SEI field is a field with many intervention studies, but it is urgent to consider also the quality of implementation and the evaluation procedures for these interventions.

### **Acknowledgments**

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## **The Role of Positive Psychology in Enhancing Well-being of University Students**

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Positive Psychology with its distinctive focus on client strengths, assets, and potentials rather than weaknesses and an inherent emphasis on what works rather than what doesn't work appears to have a natural home with all levels of educational environment. Positive Psychology can enrich university experience by moving away from a deficit approach to a problem-solving approach. It focuses on healthy functioning, positive experiences and teaches optimism rather than helplessness. Since Positive Psychology highlights human potential, positive experience and well-being there is reason to believe that techniques derived from Positive Psychology can be successfully used in enhancing wellbeing of university students. According to Rath and Harter there is evidence that positive experience at work/school is one of the five key elements to well-being (along with social, financial, community and physical wellbeing).

Over many years while working with students I have been adopting Seligman's approach based on identifying what is right with individuals, in contrast to focusing on what is wrong with them. Instead of trying to directly attain their goals. I found that helping students recognize their strengths rather than trying to forcefully fix their weaknesses is markedly more effective as it concentrates on what is good (positive emotions) and not what is wrong (negative emotions).

In this presentation I will talk about specific cases illustrating implementation of principles and techniques that I have found most useful in my practice, as well as weaknesses and limitations of this approach.

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## **The Bright Side of the Dark Side – Character Strengths behind the Dark Triad Personality Traits**

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**Keywords:** dark triad, character strengths, leaders

*Background:* Much of the research in the last few years has linked the Dark Triad traits (sub-clinical narcissism, subclinical psychopathy, and Machiavellianism) to negative outcomes. There has been increasing interest in dark personality traits in the organizational sciences, examining mainly leaders. Although the Dark Triad traits are generally considered as being undesirable, researches have pointed to these traits' potential bright side as well [1, 2].

*Aim:* Our research takes a positive psychology approach: our research aimed to reveal the specific relationships between leaders' Dark Triad traits and character strengths. Our approach helps gain a more differential insight into the potential bright and dark sides of leaders' personality for designing more specific leader development programs.

*Method:* The Hungarian version [3] of the 27-item Short Dark Triad scale [4] had been used to assess subclinical narcissism ( $\alpha = .78$ ), Machiavellianism ( $\alpha = .70$ ), and subclinical psychopathy ( $\alpha = .67$ ). We examined the 24 Values in Action (VIA) character strengths with 96 items selected and translated to Hungarian from IPIP [5] website. A total of 96 Hungarian leaders participated in the present study.

*Results:* Dark Triad traits had, depending on the specific Dark Triad trait, bright sides for leaders. Results show that specific character strengths are positively related to one of the dark triad traits. Narcissism turned out to be the brightest Dark Triad trait with benefits and potentials for leaders. We found evidence for the assumption that Machiavellianism and psychopathy also have positive resources – in form of specific strengths - for leaders but they are less powerful.

*Conclusions:* Implications for leadership development are derived. The findings support the important role of character strengths in work-related settings and the importance of taking time to go through deliberate interventions (e.g. executive coaching, leadership development training) in order to help leaders to use their strengths consciously to 'grey out' their dark traits.

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## Cross-Lagged Association between Psychological Flexibility at Work and Facades of Conformity

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**Keywords:** Acceptance and Commitment Therapy, psychological flexibility, personal value, impression management

*Background:* Psychological flexibility at work refers to individual's ability to focus on their current situation and based upon the opportunities afforded by that situation, persist with one's action in achieving their goals and values, even in the presence of challenging or unwanted psychological events (e.g., thoughts, feelings, physiological sensations, images, and memories; Bond, Flaxman, & Bunce, 2008; Bond, Lloyd, & Guenole, 2013). Psychological flexibility has been identified as one of the crucial determinants in fostering behavioral effectiveness and mental health (Hayes, Luoma, Bond, Masuda, & Lillis, 2006; Hayes, Strosahl, & Wilson, 1999; Kashdan & Rottenberg, 2010). As a value-driven individual ability, previous research argued that employees who high in psychological flexibility at work are more likely to act in accordance with their values (Bond et al., 2008;). However, this fundamental assumption, to date, has rarely been explored. In the present study, we proposed that individual with higher psychological flexibility at work expresses will not suppress personal values in conjunction with the pretense of expressing values that one does not hold (Hewlin, 2009). Drawing on Acceptance and Commitment Therapy (ACT), people who are high in psychological flexibility at work tend to observe their unwanted experiences via a detached approach that boosts their sensitivity in identifying and responding to goal-related opportunities in work (Bond et al., 2013). The goal-related context sensitivity induces a willingness to commit and persist on self-values (Kuo, Ye, Chen, & Chen, 2017) rather than pretend to fit in others' values. Accordingly, employees will be less likely to act against their chosen values. In examining this proposition, we used facades of conformity as indicator of the tendency of expressing personal value (Hewlin, 2003).

*Aim:* The purpose of this study was to examine the longitudinal relationship between psychological flexibility at work and facades of conformity in sport service employees.

*Method:* A two-wave panel survey, approximately one month interval, was used to collect research data. In the two questionnaires, participants completed the measures including psychological flexibility at work (PF) and facades of conformity (FC) and demographic information. The final sample was 177 sport service employees (50 male, 127 female) with a mean age of 30.2 years ( $SD = 6.25$ ) and an average tenure of 4.6 years. We tested our hypotheses

using cross-lagged approach with structural equation modeling based on item-level data in all analysis (Martens & Haase, 2006).

*Results:* In the results of four models (autoregressive model, cross-lagged model: PF to FC, cross-lagged model: FC to PF, full cross-lagged model), our findings revealed that after controlling gender, age and baseline latent variables, Time 1 psychological flexibility at work was negatively related to Time 2 facades of conformity. However, Time 1 facades of conformity was not significantly related to Time 2 psychological flexibility at work.

*Conclusions:* In keeping with the perspective of ACT, we found that psychological flexibility at work reduced the tendency to create facades of conformity over time. This finding provided preliminary evidence in support of the fundamental assumption of ACT as well as psychological flexibility at work, suggesting that individual difference in psychological flexibility in work context is relatively stable and employees can benefit from this ability in pursuing personal value. Moreover, our study contributed to the literature of facades of conformity by identifying a new antecedent.

### Acknowledgments

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## **Improvement of Well-being by Care Hula Dance, Through Practice at Nursing Home in JAPAN**

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*Objectives:* The purpose of this research is to measure the happiness degree by intervention experiment applying hula dance in order to raise the happiness degree of the care recipient.

The world population is aging rapidly, and it is estimated that people aged 60 years or over will reach 2 billion by 2050. Japan is experiencing the world's highest rate of aging, and has a long history of adapting policies and legislation for aging society (Ministry of Health, Labour, and Welfare of Japan, 2014).

It is a very important issue to prevent bedriddenness and depression in elderly people. It is said that exercise is effective for prevention of these condition. However we have to be careful that the exercise is fun, safe, and sustainable.

As mentioned above, the number of care recipients has increased year by year in Japan. However, the well-being of elderly people, especially care recipients, has not been studied. Therefore, we carried out a happiness degree survey using "nursing care hula" that brings rehabilitation and a sense of purpose to care recipients. Firstly, we developed a new nursing hula to allow hula dancing even for the care recipient. As a result of investigating well-being, positive emotions, and negative emotions for 72 elderly people using nursing care facilities, both well-being and positive emotions were significantly increased before and after the intervention. A negative decline was seen in negative emotions significantly.

*Conclusion:* Caring hula raised well-being, positive emotion, and it turned out that it had the effect of lowering negative feelings.

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## Teachers' and Parents' Views on Digital Communication in Finland

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**Keywords:** teacher-parent partnership and collaboration, digital communication, feedback, Finnish schools

Within last decades the development of information and communication technology (ICT) has been a dominant factor worldwide, as well as in the Finnish society. Schools have advanced their ways of collaboration and communication with parents with the help of new technological tools. Respectful teacher-parent partnership enhances pupils wellbeing and learning and supportive digital communication can be integral part in this collaboration. The content of digital teacher-parent communication has arisen frequent negative discussion in Finnish media, as the feedback teacher is giving is claimed to focus on giving too much negative feedback to pupils and focusing on irrelevant issues. This phenomenon was identified already a decade ago also in other countries media. If the feedback is merely about pupils negative behaviour, teacher-parent collaboration may be endangered and it can have negative impact on pupils wellbeing and learning motivation.

No systematic analysis have been conducted in Finland about the teachers' and parents' views on digital communication and the aim of this study is to elucidate this scarce field of science. In order to advance positive digital communication, we need research-based information about the current state of this crucial part of partnership.

This study identifies parents (N=1123) and teachers (N=118) views on partnership in digital communication. The data for this study were gathered with quantitative questionnaire measuring different elements of digital communication, such as partnership, positive feedback and unclear digital communication. Data was analysed with factor analysis and statistical differences were compared using ANOVA.

This article's writing procedure is being finished and it will be submitted shortly. Results will be reported in the poster, when this article is being accepted.

Note: This poster abstract is part of the study that started in the University of Helsinki in 2016. First phase was to investigate Finnish parents' and teachers' views on digital communication. In second phase, an intervention implemented in one comprehensive school. The aim was to teach pupils strengths skills and enhance teachers' and parents' partnership with the tools of positive pedagogy in their digital communication.

This study builds on Epstein's theory of teachers and parents partnership and studies of positive psychology as it focuses on individuals and groups strengths and well-being.

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## Positive Education in Finnish Middle School – Efficacy of the “Strength, Joy and Compassion” Project on Students’ Positive Emotions, Social Competence and Relationships to Others

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**Keywords:** positive education intervention, adolescents, positive emotions, relationships, social competence

*Background:* In Finland there is a significant amount of children who feel unwell, and a small but increasing group of children who suffer from more difficult and accumulating problems [1]. In order to increase the well-being of children it is important to develop interventions that engage both the child and important people in the child’s environment. The well-being of children should be viewed from a wider perspective than through diminishing psychiatric symptoms and behavioral problems.

*Aim:* The present study investigates the efficacy of a positive psychology intervention “Strength, Joy and Compassion” on middle school students’ positive emotions, social competence and relationships to others utilizing a clustered randomized control trial design. Our expectation was that students in the intervention group would increase their overall levels of positive emotions and social competence as well as relationships with family and peers would improve in relation to the control group. We were also interested in investigating whether intervention efficacy differed within gender and geographical region, and whether teachers’ engagement effected the outcome.

*Method:* A total of 154 middle school students (aged 10-12) from southern and western Finland attended the study. Four classes (86 students) participated in the well-being lessons and four control group classes (68 students) followed their standard curriculum. The intervention consisted of 36 well-being lessons within the school year 2016-2017. Various methods were used in data collection: the Experience Sampling Method (ESM) to assess in-the-moment experiences and coping strategies, physiological measures on stress and health (cortisol, heart rate variability HRV), and questionnaires for the students, parents and teachers. The data was gathered at baseline, post-intervention and 3-month follow-up (questionnaire).

*Results:* Preliminary results of our study will be presented (questionnaire, ESM, HRV). The data is currently statistically analyzed.

*Conclusions:* Preliminary results from student questionnaires show desirable trends in investigated themes. Focus group feedback has also been promising. More detailed results will be presented at the conference.

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## Parental Autonomy Support, Grit and Psychological Well-being between Han and Tibetan Nationality in Chinese Emerging Adults: A Multigroup Path Analysis

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**Keywords:** grit, psychological well-being, parental autonomy support, Tibetan nationality, college students

*Background:* Previous research has shown that parental autonomy support is associated with psychological well-being<sup>[1]</sup>. Yet, it is unclear whether autonomy need is a Western ideal and only focus on individualism. Besides, non-cognitive role in these relationships is seldom understudied. Meanwhile, some theorists have questioned whether measures of well-being have similar meanings in differing cultural contexts<sup>[2]</sup>. As two typical Chinese nationalities, cultural differences between Han and Tibetan nationality are diverse<sup>[3]</sup>, however, little research focus on national cultural differences, especially in the background of collective cultural contexts.

*Aim:* The current study aimed to examine the relationship between parental autonomy support and psychological well being between Han and Tibetan nationality in Chinese emerging adults. Also, we assessed whether such variables were mediated by grit in both groups.

*Method:* This study used cross-sectional and correlational design. Participants were 177 Han nationality (72.3% girls) and 59 Tibetan(71.2% girls) nationality adults aged 18–25 years, who completed a questionnaire survey including parental autonomy support(P-PASS), grit(GRIT-S) and psychological well-being (FS).

*Results:* Multigroup path analyses controlling for age, gender, and SES showed that (a) parental autonomy support and grit was positively related to psychological well-being in both groups; (b) grit mediated the link between parental autonomy support and psychological well-being in both groups; (c) the direct and indirect effects were invariant across the two groups.

*Conclusions:* Our findings suggested that parental autonomy support contributes to adults' psychological well-being in Chinese cultural context. Interventions may focus on the enhancement of non-cognitive factor(i.e., grit) as well as the perceived autonomy support, changing from risk models towards more positive development models.

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## **A Re-Examination of the Structure of Subjective Well-being using Person-Centered Approach: Evidence from Three Countries**

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**Keywords:** subjective well-being, person-centered approach, Dynamic Modular Framework

*Background:* Tree decades ago, Diener [1] conceptualized a Tripartite model of subjective well-being (SWB), suggesting complex nature of SWB which contents cognitive (life satisfaction) and affective evaluation (positive and negative affect) of person's life. Since then, little consensus has been achieved to date regarding the structure of SWB, respecting interrelation of these three components. According to Dynamic Modular Framework [2] SWB components can be self-organized into distinct configurations, which can be congruous (low and high SWB) or incongruous. The idea about incongruity, which obtained inconsistency among SWB components, is relatively new and rarely examined. However, recent findings indicated that system of SWB components is more informative for person's functioning than individual components itself [3].

*Aim:* The purpose of this study was to evaluate SWB as dynamic system using person-centered approach and to examine stability of SWB configurations across different periods (one year in Serbia and ten years in the United States) and across different countries (Serbia, Japan and the United States).

*Method:* The sample included 1059 students from Serbia (86% females), 1027 adults from Midlife in the Japan Survey (50.8% females) and 2369 participants from Midlife in the United States Survey (55.1% females). Follow-up study was organized after one year later in Serbia, while the second wave of MIDUS study was done 10 years after the baseline. Participants completed the measures of positive and negative affect (PANAS in Serbia; and 9-item version of PANAS in Japan and the United States) and life satisfaction (LS) (Satisfaction with Life Scale in Serbia; Single-item life satisfaction measure in Japan and the United States). The data were analyzed using Latent Profile Analysis in Mplus.

*Results:* The results showed that a five-profile solution provided a best fit to the data in all three countries. The following SWB configurations were found: high SWB (high PA-LS, low NA), low SWB (low PA-LS, high NA), medium-high SWB, and two incongruous profiles - low LS and high LS, both with medium scores on the affective component. The most frequent profiles were high SWB (45.3% in Japan, 57% in Serbia, 58.5% in the United States) and medium-high SWB (29.6% in Japan, 21.5% in Serbia 27.4% in the United States), whereas the remaining profiles comprised between 20% and 25% of samples. Depending on the sample, low LS profile comprised between 5.7% and 9.2%, high LS between 6.3% and 13.6% and low SWB between 1.9% and 3.3% participants. The five SWB configurations were replicated over time within Serbia and the United States.

*Conclusions:* The present study provides a cross-country and longitudinal support for the dynamic modular framework of SWB, indicating that SWB can be organized in a variety of ways within individuals. Theoretical implications of the findings will be discussed in the light of structural models of SWB.

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## Sculptor or Gardener? Dilemmas in Strength-Based Education

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*Background:* In a Danish research project [1], I identified VIA-strengths in children age 6-16 in order to confirm whether all 24 VIA-strength is developed by the age of 6 when the children start school in Denmark, and also to confirm at what age the different character strengths seem relatively stable corresponding to the criteria for VIA-strengths [2]. Lopez & Louis [3] and Linkins et al [4] have suggested different principles for strength-based education and how to implement it in schools. The findings in the research project have an impact on the pedagogical methods used in education as well as the upbringing of children making it necessary to discuss strength-based education and two different, commonly used strength-based approaches: The Sculptor cultivating specific and valued strengths or the gardener nurturing and fertilizing the strengths of the specific child.

*Aim:* The research project aims to create new knowledge of strength development in children. Furthermore, to research pros and cons of cultivating or nurturing strengths in children.

*Method:* 750 children age 6-16 has identified their strengths using the Strength Compass [5] before and after strength-based interventions. The results are compared to national and international research projects in a comparative analysis for a sculptor or gardener approach.

*Results:* All 24 VIA-strengths are developed at the age of 6 supporting the hypothesis of Seligman [6]: "I prefer to think of normal newborns as having the capacity for every one of the twenty-four strengths as well. 'Strengthening drift' sets in over the first six years of life." 16 out of 24 VIA-strengths seem relatively stable from the age of 6 meeting the criteria for the VIA-strengths. [2]

*Conclusions:* Whether we choose to be sculptors or to be gardeners the way we handle our flashlight will lighten up a specific area while others are left to darkness. The important message is: "All 24 Character Strengths matter" [7]

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## The Relationship between Balanced Time Perspective and Subjective Well-Being: The Mediation Effect of Happiness Enhancing Activities

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**Keywords:** balanced time perspective, subjective well-being, happiness enhancing activities, the early-aged adult, late middle-aged adult

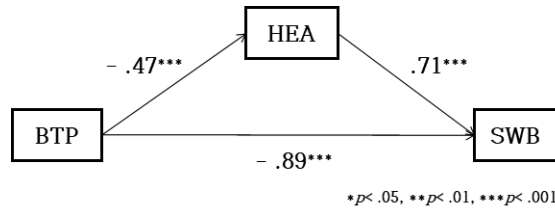
*Background:* Time perspective (TP) is the unconscious attitude that people have about time. TP is composed of Past-Positive TP (PP), Past-Negative TP (PN), Present-Hedonistic TP (PH), Present-Fatalistic TP (PF), Future TP (FU) [1]. According to previous studies of TP, the higher PP and FU related the higher life satisfaction [2], and the lower PN and PF related the lower anxiety and depression [1]. In particular, Balanced Time Perspective (BTP) showed highly correlated with happiness indicators [3][4]. BTP represents 'high' PP, 'moderately high' PH and FU, 'low' PN and PF [5]. People need to have BTP in order to be psychologically and physically healthy and to have optimal social functioning [1]. TP is a predictor of individual behavior and attitude as well as happiness [5]. People seek various Happiness Enhancing Activities (HEA) in everyday life for happiness [6]. To do HEA that composed of goal-focused activities, recreational activities, community activities, and activities with family and friends frequently was related the higher Subjective well-being (SWB) [6]. In order to promote happiness, it is necessary to provide information on practical methods for practicing in daily life beyond knowing factors related to happiness.

*Aim:* The purpose of this study was to investigate the mediational effect of HEA on the relationship between BTP and SWB aimed at the early-aged adults and late middle-aged adults.

*Method:* Two samples were collected by dividing 192 of early-adults (aged 25~35 years) and 180 of middle-aged adults (aged 55~65 years). The study was measured by the series of questionnaires including the Zimbardo Time Perspective Inventory, the Korean Version of the Happiness-Enhancing Activities Questionnaire, Satisfaction with Life Scale, and Positive and Negative Affect Scale. BTP was used the Deviation from the Balanced Time Perspective (DBTP) [5]. DBTP values close to '0' indicate BTP. The data were analyzed by the Multiple mediator models with SPSS 23 and SPSS Macro.

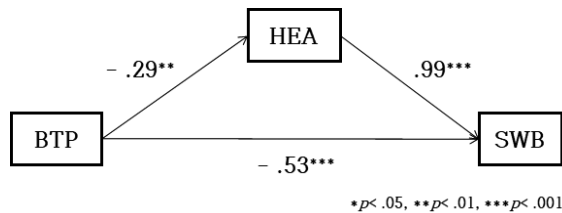
*Results:* In the early-aged adults, BTP significantly explained HEA [ $\beta = -.47, p < .001$ ], SWB [ $\beta = -.89, p < .001$ ], HEA also significantly explained SWB [ $\beta = .71, p < .001$ ]. As a result of the significance test for the mediating effect of HEA in the relationship between BTP and SWB in the early-aged adults, the mediating effect of HEA was significantly explained because the 95% confidence interval on the pathway of BTP to SWB through HEA did not include 0, ranging from  $-.53$  to  $-.18$ . In late middle-aged adults, BTP significantly explained HEA [ $\beta = -.29, p < .01$ ], SWB [ $\beta = -.53, p < .001$ ], HEA also significantly explained SWB [ $\beta = .99, p < .001$ ]. As a result of the significance test for the mediating effect of HEA in the relationship between BTP and SWB in late middle-aged adults, the mediating effect of HEA was significantly explained because the 95% confidence interval on the pathway of BTP to SWB through HEA did not include 0, ranging from  $-.49$  to  $.13$ .

*Conclusions:* BTP had a positive effect on SWB through HEA in both early-aged adults and late middle-aged adults. The mediating effects of HEA were significant in both early-aged adults and late middle-aged adults. In particular, mediating effect of HEA was higher in late middle-aged adult than in the early-aged adults.



**Figure 1.** the mediate model of HEA in the relationship between BTP and SWB in the early-aged adults  
 Note 1. BTP= Balanced Time Perspective, HEA= Happiness Enhancing Activities, SWB= Subjective well-being

Note 2. The higher the negatively correlation with BTP, the more positively correlation. Because the more balanced the time is, the closer it is to '0'.



**Figure 2.** the mediate model of HEA in the relationship between BTP and SWB in late middle-aged adults  
 Note 1. BTP= Balanced Time Perspective, HEA= Happiness Enhancing Activities, SWB= Subjective well-being

Note 2. The higher the negatively correlation with BTP, the more positively correlation. Because the more balanced the time is, the closer it is to '0'.

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## Longitudinal Analysis Using LGM for ‘Three Dimensions of Ego-Resilience’ in Korean Adolescents: Focused on the Role of Adaptive Adjustment and Stable Maintenance in Personality Systems

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**Keywords:** ego-resilience, longitudinal analysis, latent growth model

*Background:* Ego-resilience(ER) is a capacity that enables individuals to adapt to constantly changing environmental demands. The function measured by ER is more related to plasticity or elasticity, providing the ability to flexibly adjust the personality system when necessary. Thus, ER is conceptualized as broader sense than the existing Resilience theory measured primarily by Revised Connor-Davidson Resilience Scale (R-CD-RISC). Block and Block, researchers who first presented ER concept, described processes underlying ER as: AEW –which indicates that an individual is continuously looking for new information and experiences in every events; RPSS – which calls attention to the fact that adaptive flexibility can function only when it is backed up by the appropriate skills; IPS-which describes the ability to recover quickly after stressful, unexpected events. [1].

*Aim:* The purpose of this study was to investigate the longitudinal relationships between the initial values and slopes of three dimensions of ego-resilience (i.e. Active Engagement with the World (AEW), Repertoire of Problem Solving Strategies (RPSS), and Integrated Performance under Stress (IPS)).

*Method:* In this study, ER11 was used as a measurement to assess ego-resilience, and it is a revised measure of the 14-item version of the ER89 scale. ER89 and ER11 are better suited to measuring the plasticity or flexibility-related functions of resiliency. The study utilized four-wave longitudinal data from panel data conducted by Korean National Youth Policy Institute. The first survey was conducted in 2010, the second in 2013, the third in 2015 and the fourth in 2016. All participants were 14-year-olds at the first, 16-year-olds at the second, 19-year-olds at the third, and 20-year-olds at the fourth surveys. The longitudinal data were analyzed using latent growth modeling (LGM) by AMOS 18.0.

*Results:* The result of the study ( $\chi^2=271.17$ ,  $df=45$ ,  $RMEA=.046$ ,  $TLI=.954$ ,  $CFI=.974$ ) indicated that high initial values (intercept) for AEW were associated with a higher rate of increase (slope) in IPS ( $\beta = .76$ ,  $p < .01$ ) and RPSS ( $\beta = .38$ ,  $p < .05$ ). In addition, high initial value for RPSS was associated with a high rate of AEW ( $\beta = .23$ ,  $p < .1$ ). It suggests that these two dimensions, AEW and RPSS, have a reciprocal relationship. In other words, active attempt for new information and experience is able to enhance adaptive flexibility which can be developed using appropriate skills, and appropriate skills for flexible adaptation can be refined through new attempts. However, the initial value for IPS did not associated with the change of AEW and RPSS. That is, the IPS is developed only by the AEW without contribut-

ing to the development of other ER components. It means that IPS would be able to function independently of the RPSS.

*Conclusions:* Considering these results inclusively, it suggests that AEW and RPSS function to adjust the personality system in an adaptive way to the dynamically changing environment, and IPS function to keep the personality system stable and intact. Therefore, psychologists, counselors and school teachers should encourage active involvement in changing environment which is considered as the first step in developmental process of ER for students to improve their ego-resilience. In addition, experts should also provide alternative education or counseling programs that can help students recover from stress quickly. This longitudinal study can promote understanding of developmental process of ego-resilience and contribute to the literature by informing the design of enhancing programs for flexible adaptation.

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## Materialism and Happiness of Korean Middle-Aged

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**Keywords:** materialism, orientation to happiness, subjective well-being, middle-aged

*Background:* According to a recent meta-analysis of the 259 articles on the relationship between materialism and psychological well-being, regardless of the definition of gender, race, state, materialism, is consistently a powerful variable that hampers life satisfaction and happiness[1]. One of the reasons for this is that the materialistic values are most emphasized in the acquisition of or possession of materials among the various goals of life, and they neglect psychological values or desires that are important to happiness[2]. We think that materialism causes unhappiness because it makes it difficult to find the ultimate value and meaning of life. The purpose of this study is to investigate the idea of the material of Korean middle-aged people and to identify the difference between orientation to happiness and happiness, according to the materialism and those values which do not.

*Aim:* Koreans are not happy compared to economic riches. One of the reasons is pointing to materialism. Despite the consistently reported findings that a strong obsession with possessing or acquiring a substance hinders happiness, Koreans struggle to possess more material[3]. This is inefficient in terms of happiness. Investigating the thoughts and values of Korean middle - aged people can be used as a basic data for happiness research.

*Method:* A questionnaire survey was conducted on 489 middle - aged people living in Gyeongsang - do including Busan. The questionnaire includes questions about which of the following is more important: 'love/friendship' and 'money'; And a scale of orientation to happiness was included to measure the way to pursue individual happiness[4]. Also, to measure happiness, we asked about life satisfaction, positive emotion and negative emotion experienced in the last 2 weeks[5].

*Results:* 75%(n=365) of the respondents chose 'love/friendship' and 23%(n=112) chose 'money'. However, considering the national goal, 53%(n=255) of the respondents answered materialism as more important, and only 13.3%(n=65) answered post materialism was more important as the goal of country. Selected 'love/ friendship' and national goals related to post-materialism were 52 respondents. And selected 'money' and national goals related to materialism were 76 respondents. We divided the two groups, 'true materialism' and 'true post-materialism'. As a result, the two groups showed significant differences in orientation to meaning among the three orientation to happiness, and subjective well-being. The 'true materialism' group had lower orientation to happiness than the 'true post-materialism' group. And the subjective well-being was also significantly lower.

*Conclusions:* Korean middle-aged think that psychological value such as 'love/friendship' is more important than 'money' at a personal level. However, when it comes to choosing important national goals, a majority of the respondents indicated that national goals related to materialism were important. Based on these results, though Koreans 'think' that psychologi-

cal value is important, it seems to be the abundance of material that they want to pursue. This contradictory result can be considered as the possibility that the choice of ‘love/friendship’ was high due to social desirability. This study suggests that changes in the individual values and social values are needed to promote happiness for Koreans. We hope that this study will be used as basic data for happiness research.

**Table 1.** Percentage of national goals that each group that selected 'love / friendship' or 'money'

Select 'love/friendship' (n=365)		Selected 'money' (n=112)	
Materialism	179 명 (49.0%)	Materialism	76 명 (67.9%)
Post-Materialism	52 명 (14.2%)	Post-Materialism	13 명 (11.6%)
Neutral	134 명 (36.7%)	Neutral	23 명 (20.5%)

**Table 2.** The difference of orientation to happiness between ‘true materialism’ and ‘true post-materialism’ group

	True materialism (n=76)	True post-materialism (n=52)	F
Orientation to pleasure	20.63 (2.80)	19.10 (2.99)	8.78**
Orientation to meaning	18.79 (3.47)	21.02 (3.15)	13.70***
Orientation to commitment	19.37 (2.96)	20.35 (3.30)	3.01

\*\*  $p < .01$  , \*\*\*  $p < .001$

**Table 3.** The difference of Subjective well-being between ‘True materialism’ and ‘True’ post-materialism’ group

	True materialism (n=76)	True post-materialism (n=52)	t
Subjective Well-being	43.78 (11.12)	50.19 (9.62)	3.38**

\*\*  $p < .01$

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## The Relationship between Work-Family Conflict, Coping Strategy and Depression: A Study of Dual-Income Taiwanese Couples in the Childrearing Stage

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**Keywords:** work-family conflict, coping strategy, depression, dual-income couples, childrearing

*Background:* According to the report of the World Health Organization, stress of the surroundings is one of the most important factors that cause negative influences on mental health [1]. For dual-income families in the childrearing stage, stresses related to work and family may cause negative effects on mental health. In addition, coping strategies individual use to manage the stress may also play an important role on individual's mental health. Previous research indicates that for individuals adopting more negative coping strategies, their physical and mental health tend to be worse [2]. Studies also show that different types of coping strategies have significant different effects on individual depression [3] [4].

*Aim:* This study examines the relationship between work-family conflict, different types of coping strategy (i.e., work-related coping strategy, family-related coping strategy and seeking support coping strategy) and depression.

*Method:* Data are drawn from a 5-year longitudinal research project that focuses on work and family issues. The data were first collected from couples who lived in northern Taiwan and their first child is in preschool. This study uses the fifth wave of data with 213 couples. We only include dual-income couples in the sample and get 145 dual-income paired couples (290 individuals) in the final sample. All the measures used in this study show reasonable reliability and validity.

*Results:* 1. For both husbands and wives, work-family conflict is positively related to depression. More work-family conflict significantly predict higher depression. 2. For husbands, the more family-related coping strategy husbands use, the less depressed they feel. 3. For wives, the more work-related coping strategy they use, the higher depression they feel; the more seeking support coping strategy they use, the lower depression they feel.

*Conclusions:* Results of the study suggest that for married people in the child-rearing stage, work-family conflict is a strong predictor of depressive symptoms. Moreover, different coping strategies they use result in different level of depression, which is gender specific though. Since family-related coping strategies refer to lowering the standard of household or reducing the time spent on household, we suggest that husbands, rather than wives, using those strategies may be culturally accepted for the traditional gender norm and thus lower their depression. Our results also indicate that for wives, work-related coping strategy, that is, giving up opportunities for a job promotion or reducing the time spent on work, result in higher depression. Only seek-support coping strategies reduce their depression. Possible explanations are that those women who decide to stay in the job market after having a child



may focus more on personal career choice. Work-related coping strategies may mean a great sacrifice for them and thus are not the first or best choice for them to cope with stress. Looking for resources outside the family may be a better alternative.

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## Proactive Personality, Cognition, and Trust: A Moderated Mediation Model

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**Keywords:** proactive personality, internship, trust, supervisor

*Background:* Research has indicated that employees with proactive personality have more career success [9], and students with proactive personality exhibit more effort and behavior in job searching [5]. According to the model of individual-level proactive behavior [4], proactive personality brings about superior performance through self-efficacy, which refers to individuals' evaluation about their capability to accomplish specific tasks [2]. However, as proactive personality is a stable trait [6], individuals/situational differences become the sources to reinforce the links among proactive personality, internship self-efficacy, and internship performance, such as social support [11]. During students' internship, the supervisor plays a critical role [12]. Notably, power difference is a critical factor in the relationship of trust between a trustor and a trustee, especially for a low-power party [10]. Because the high-power class has abundant resources and experience, members of the low-power class are more sensitive to the trust-related information from the high-power class [7].

*Aim:* We aimed to examine whether interns' trust in a supervisor moderates the mediating model of internship self-efficacy between proactive personality and the perception of performance. Therefore, we hypothesized that students' internship self-efficacy will have a stronger mediation effect on the relationship between proactive personality and internship performance when trust in a supervisor is high rather than low.

*Method:* A total of 176 students (interns) were recruited from the universities and colleges in Taiwan. The mean age of participants was 22 ( $SD = 1.63$ ), and 58% were female. Participants in this study were informed of the oncoming internship and volunteered to participate in this study. Data were collected with 2 different time points with an interval of 3 months. Participants' demographics and proactive personality were investigated at time 1. At time 2, internship self-efficacy, trust in a supervisor, and self-report internship performance were measured. Before the questionnaire was filled out, a consent form was obtained from all participants.

*Results:* To test whether trust in a supervisor would moderate the mediating effect of self-efficacy on the relation between proactive personality and internship performance, we adopted the approach of Model 2 [8] to examine the moderated mediating effect. We conducted centering (converting to z scores, with  $M = 0$  and  $SD = 1$ ) on proactive personality, internship self-efficacy, and trust in a supervisor [1]. The results showed that students' internship self-

efficacy positively mediated the relationship between proactive personality and internship performance when they had high trust in a supervisor (conditional mediation effect = .06,  $p < .05$ ). Conversely, students' internship self-efficacy did not mediate the relationship between proactive personality and internship performance when they had low trust in a supervisor (conditional mediation effect = .05,  $p > .05$ ). Therefore, our hypothesis was supported.

*Conclusions:* This study examined a moderated mediator of trust in a supervisor in the relationships among proactive personality, internship self-efficacy, and internship performance. The results elaborated on the model of individual-level proactive behavior [4]. Interns who trusted in a supervisor would significantly strengthen the link between proactive personality and internship self-efficacy, which, in turn, induced better performance by enhanced intern self-efficacy. Although work-related self-efficacy does not change an individual's actual competencies, it alters their estimation of control over their workplace and affects the how hard and how long they strive to overcome the unfamiliar tasks [3]. Hence, in the face of hindrance, interns with strong work self-efficacy are more likely to complete tasks through effective effort allocation. Especially, to risk the engagement of being proactive, it is crucial that employees perceive support from a supervisor or a powerful, highly placed person within an organization [4].

### Acknowledgments

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## Moral Judgment of Fourth Grade Elementary School Children in an Asian Society

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**Keywords:** moral judgment, punishment oriented, self-interest oriented, fourth graders, Asian

*Background:* Psychological theories of moral development have been dominated by the seminal work of Lawrence Kohlberg, consisting of 6 developmental stages of moral reasoning, which can further be grouped into three levels of morality: pre-conventional, conventional, and post-conventional morality. Kohlberg suggested that ~80% of children at 10 years old may still be at the pre-conventional level, which includes obedience and punishment driven (stage 1) and self-interest driven (stage 2) stages. However, it is suggested that these developmental stages may be modified by other factors such as cultural norms. To date, data on moral development in Asian cultures/societies remain sparse.

*Aim:* The purpose of this study was to examine whether the pre-conventional level morality of Kohlberg's theory has been extensively developed in fourth grade children (mean age=9.8 years) in Taiwan. We designed four story contexts, each with a fictitious fabricated version and a real-life simulated version, to test: (a) when facing punishment threats, whether children make punishment avoidance choices rather than altruistic/loyalty based choices; (b) when facing temptations, whether children make self-interest based choices rather than altruistic/loyalty based choices.

*Method:* 70 fourth grade students (47% male) were recruited from elementary schools in Yilan county, Taiwan. Each child was tested individually by reading four stories facing a dilemma: (1) a moral judgment (e.g., whether to help a friend in trouble) under punishment threats, (2) an immoral judgment (e.g., whether to betray a friend) under temptations, (3) a moral judgment under temptations (towards immoral decisions), and (4) an immoral judgment under punishment threats (towards moral decisions). Children were randomly given either fictitious fabricated or real-life simulated stories to test these contexts. After each story, children were asked to retell the story again by using the pictures to assure their understanding. For each story, children were asked to answer their decisions given 5 levels of punishment threats or temptations (from none to highest level), and the experiment stopped whenever they answered "no" to a moral-judgment story and "yes" to an immoral-judgment story. A child was characterized as persistently altruistic if answering "yes" to the moral-judgment stories under all levels of punishment threats or temptations, and was characterized as persistently loyal if answering "no" to the immoral-judgment stories under all levels of temptations or punishment threats.

*Results:* Under punishment threats, 67.1% (n=47) of children were persistently altruistic ( $p=.0028$ ) and 77.1% (n=54) were persistently loyal ( $p<.0001$ ). Under temptations, 78.6% (n=55) were persistently altruistic ( $p<.0001$ ) and 75.7% (n=53) were persistently loyal ( $p<.0001$ ). In other words, only approximately 25% of children in our study population were at the pre-conventional level of moral development. No differences were observed between the findings from fictitious fabricated and real-life simulated versions of stories ( $p>0.05$ ).

*Conclusions:* In this group of fourth grade Asian students, about 75% of children may have already passed the pre-conventional stages of moral development. Our findings support the possibility that cultural factors may affect the progression in Kohlberg's framework. Future studies are warrant to examine the cultural and social influences on moral development.

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## **Prioritizing Positivity across the Adult Lifespan: Initial Evidence for Differential Associations with Positive and Negative Emotions**

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Prioritizing positivity (PP) has been presented as an effective mechanism to increase positive emotions and reduce negative emotions. As positive emotional experiences are more characteristic of older rather than younger individuals, the question arises whether they use PP more frequently, more effectively, or both. Along with replicating previous findings, the current study sought to (a) examine PP stability across the lifespan, (b) explore the role of age as a moderator, and (c) identify selected situations facilitating the likelihood of routinely experiencing positive and negative emotions. Based on a sample of 604 adults, we found that PP, while stable in frequency across the lifespan, plays different roles at different life stages. PP was found to be effective in increasing positive emotions in old adulthood, but not in young adulthood. It was found more effective in reducing negative emotions in young adulthood than in old adulthood. A content analysis of 1037 situations revealed that interpersonal interaction is critical in both increasing positive and preventing negative emotions, independent of age. However, pleasurable situations were more likely to be prioritized by young adults to trigger positive emotions, whereas older adults focused on avoiding unfulfilling situations, due to the negative emotions that they trigger.

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## Concordance of Goals and Meaning in the Family Domain: Associations with Demographic Variables and Well-being in a South African Group

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**Keywords:** goals, meaning, well-being, family, sociodemographic variables

*Background:* Goals and meaning are important facets of eudaimonic well-being. Scholars have studied goals and meaning separately, but research is sparse on the concordance of goals and meaning, especially in specific life domains and how these may be associated with demographic variables and other indicators of well-being. For this study, patterns of concordance of goals and meaning was conceptualized as no-goal-no-meaning, both-goal-and-meaning, only-goal-no-meaning, and only-meaning-no-goal.

*Aim:* The aim of this study was to explore the concordance of goals and meaning in the family domain, and how different patterns of concordance are associated with demographic variables and indicators of well-being.

*Method:* A mixed methods convergent parallel design was used with simultaneous cross-sectional collection of quantitative and qualitative data. Qualitative data were transformed to quantitative data using the coding categories developed by Delle Fave et al (2011). The coded qualitative data on goals and meaning as manifested in the family life domain were analyzed to establish the degree of concordance thereof. Participants were 585 South Africans - 18 years or older; at least an high school educational level. Measures included a Socio-demographic questionnaire; Satisfaction with Life Scale; Positive-Negative Affect Schedule; Meaning in Life Questionnaire; Mental Health Continuum; Semi-structured open-ended questions on important goals and meaning. Analyses were conducted to determine the frequency of important goals and meaningful things, and to determine the alignment patterns between goals and meaning within the family domain per person, and then applying one- and two-way ANOVA's to establish associations among variables.

*Results:* Results indicate a high frequency of the goals-and-meaning pattern in the family domain. Patterns of concordance differ in several respects among categories in demographic variables such as age. Significant interactions are found among patterns of alignment, demographic variables and indicators of well-being, for example: People with tertiary education experience much higher levels of presence of meaning than people with only secondary training, in particular in association with the goals-only pattern, and lower levels of search for meaning in the case of all alignment patterns. People with an above average standard of living show significantly higher levels of life satisfaction across all patterns than participants with an average or below average standard of living, and the latter manifesting in particular low satisfaction with life in the case of both-goals-and-meaning pattern of alignment. More results to be reported.

*Conclusions:* Findings suggest that understanding of well-being can be informed by taking cognizance of sociodemographic variables and how these relate to alignment patterns of goals and meaning shown in this study for the family domain. Further research can explore the same for other life domains.



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## The Role of Psychosocial Factors in Self-Rated Successful Ageing: a Sample of Lithuanian Elderly People

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**Keywords:** successful ageing, older age, multidimensional approach

*Background:* Successful ageing has been one of the most popular concepts in the gerontological literature over the last few years. At present, there is no universally accepted definition of what the term “successful ageing“ means, and which factors are associated with it.

*Aim:* The purpose of this study was to assess the role of psychological and social factors in self-rated successful ageing in older adults in Lithuania.

*Method:* The subjects of the study were 396 older adults. The mean age of the respondents was  $67,1 \pm 5,8$  (age range 60-84). *Methods:* Data were collected using Self-Rated Successful Aging Scale [1]; Rapid Assessment of Physical Activity [2]; Activity and Psychological Well-Being in Older People Scale [3]; A Short Scale for Measuring Social Support in the Elderly [4]; Geriatric Spiritual Well-Being Scale [5]; The Satisfaction With Life Scale [6]; Subjective Age Identity Scale [7].

*Results:* The results of the study showed that older adults characterized as more subjective successful agers had a significantly higher level of social and physical activity, social support, life satisfaction, happiness, spirituality, satisfaction with the living standards, younger subjective age identity, better self-rated health. The better self-rated health, younger subjective age identity, higher level of life satisfaction, intellectual social activity and learning, better subjective eating habits, higher number of grandchildren and having a job were the best independent predictive factors of self-rated successful ageing.

*Conclusions:* The study confirms research findings on multidimensional approach of successful ageing. Nevertheless, further studies are needed to highlight the causes of successful ageing.

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## The Career Adaptation of College Athletes' Career Transition Process: The Application of the Proactive Motivation Model

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**Keywords:** student athletes, career development, athletic identity

*Background:* The career development of professional athletes has been widely discussed by both the academia and the circle of practice. In order to strive for good performance in sports competition, most student athletes tend to dedicate a great amount of time on training, which causes their incapability of looking after both their sports training and their studies. As a result, student athletes often have difficulties cultivating other skills for future jobs after graduation or retirement, contributing to career adaptation crisis.

*Aim:* Consequently, this study aimed to focus on senior athletic students in college/university and explore the mechanism of their career development. According to the model of proactive motivation [6], we proposed that career adaptability could mediate the relationship between athletic identity and proactive career behavior of student athletes. Research indicated individuals with high career adaptability are more likely to have suitable job, achieve success at work, and have higher well-being [3]. In addition, self identity is a key factor of career adaptability. Athletes with high athletic identity may treat retirement with negative viewpoint due to the reluctance to consider careers other than as an athlete, and have low acceptance of new skills [2], high career uncertainty and anxiety [4], and make a long adaptation to the retirement [5].

*Method:* There were 246 college students (55.7% are male) from four departments of sports and physical education participated in this study. Data were collected through questionnaires.

*Results:* According to the standards [1], the results of hierarchical regression analysis indicated that career adaptability partially mediated the relationship between athletic identity and proactive career behavior of student athletes. The results showed athletic identity was positively associated with career adaptability ( $\beta = .48, p < .05$ ), athletic identity was positively associated with proactive career behavior ( $\beta = .53, p < .05$ ), and career adaptability was positively associated with proactive career behavior ( $\beta = .63, p < .05$ ). In addition, both athletic identity ( $\beta = .20, p < .05$ ) and career adaptability ( $\beta = .50, p < .05$ ) were significantly associated with proactive career behavior. Further, the value of variance inflation factor is 1.30, representing there is no collinearity issue.

*Conclusions:* Athletic students in college/university with high athletic identity have high career adaptability, which would bring proactive career behavior. In contrast to the negative association between athletic identity and career adaptability found in previous research,

the positive relation in this study may be because participants are well aware that athletics is a short career and the majority has to transit career [7]. By expanding the use of the proactive motivation model, the study could be served as consultation to schools and companies when cultivating student athlete career development.

### **Acknowledgments**

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## Border Crossings as Rites of Passage

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**Keywords:** borders, crossings, rites, passage, cultures

*Background:* Among various types of rites of passage discussed by scholars over the past century, border crossings (or “territorial passages”) have figured prominently, often relying on the insights of van Gennep [1]. More recently, border crossings have become an area of special controversy, with increasing numbers of refugees and other migrants entering the wealthier countries in Europe and North America. Therefore, it is opportune to reconsider the meaning of border crossings from both psychological and anthropological perspectives.

*Aim:* The research aims to review relevant literature on border crossings and to gather data in the form of narratives from informants with varying perspectives on four especially important borders: 1) between France and the United Kingdom, especially regarding the Chunnel crossing; 2) between the USA and Mexico, especially regarding crossings in Texas and California; 3) between North and South Korea, with special attention to the 2018 Winter Olympics; and 4) with a historical perspective (using remembered information from informants who experienced this) about the former border between East and West Berlin.

*Method:* The research method will mainly be qualitative, in that we are currently gathering data about perspectives on border crossings from informants of various backgrounds (e.g., Syrian, Algerian, French, British, East German, West German, American, and Mexican) from cities that will include Paris, London, Calais, Berlin, San Antonio, San Diego, and Tijuana.

*Results:* Our results are mainly trending toward a disjunction in perspective between informants from less wealthy versus more wealthy national backgrounds. Moreover, there are major differences in perspective depending on the border (a kind of interaction, e.g., Syrians vs. British as compared to Mexicans vs. Americans).

*Conclusions:* From the viewpoint of positive psychology, border crossings can be important rites of passage leading to increased human happiness. Some cases are clearer examples of this than others, with the crossing of the Berlin Wall (and its later obliteration) being an especially important example. In other cases, although migrants typically have some dreams of happiness on the other side of the border, these dreams may be mostly unfulfilled. By comparing substantially different types of border crossings, we hope to shed light on how these important territorial rites of passage can lead to increased human happiness.

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## Life Events across the Life Course: Its Impact on Autobiographical Memory and Well-being

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**Keywords:** life events; autobiographical memory; well-being; life course

*Background:* Life events impact on autobiographical memory. People remember more positive events than negative [1]. Life events play an important role on individual's growth and identity, having a direct influence on well-being. The social and cultural context becomes relevant in terms of content and the way in which people remember and value their life events [2].

*Aim:* The present study explores the relationship between personal life events, autobiographical memory and well-being in Basque Country and Palestine Gaza Strip.

*Method:* It is a transversal and retrospective study. A CEVI instrument was applied in two samples stratified in 5 age-groups: 20-24, 35-39, 50-54, 65-69, 80-84. Basque Country:  $N = 267$ ,  $M = 38.57$  ( $DT=20.96$ ), 59.9% females; and Palestine Gaza Strip:  $N = 676$ ,  $M = 52.79$ , ( $DT=21.02$ ), 47.8% females. Individual valuations were correlated to eudemonic and hedonic well-being [3].

*Results:* Contextual differences were found and some similarities related to the domains to which these memories belong. Both samples reported more positive than negative autobiographical memories. The evolution of gains versus losses and well-being throughout life span, gains are higher than losses with the exception the oldest age group. Levels of well-being gradually decline from adulthood to very old age. Regarding the influence of life events on well-being, recent events correlate strongly with well-being in individualist society, like Basque Country. In collectivistic society like Gaza, long-term changes were strongly associated with well-being. Total positive events scores were related to subjective well-being, as well as to its hedonic and eudaemonic dimensions, stronger than negative events.

*Conclusions:* This study highlights the positive nature of autobiographical memory, but also life experience. The results corroborate that people, regardless of contextual factors, experience changes of similar characteristics and remember have lived a greater number of positive than negative events.

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## Reliability and validity of Subjective Eating Well-Being Scale

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**Keywords:** eating, subjective well-being, eating scale

*Background:* There are various aspects to eating in our lives. Enjoyment and satisfaction of food are associated with self-esteem, school phobia, and mental and physical health (Omote, 2009). In order to enable people to live happily, it is important that they eat with pleasure. It is also necessary to develop an eating well-being scale with high criterion-related validity to create a more effective psychological eating program.

*Aim:* The purposes of this study were to develop a Subjective Eating Well-Being Scale and to evaluate its reliability and validity evaluated.

*Method:*

1. Creating scale items

Totally, 30 high school students and 30 university students participated in this study. They were asked to freely respond to the question: "When do you eat to feel happy?". Based on the answers, 45 scale items were created.

2. Confirming the reliability and validity of the scale

Totally, 110 university students (men=38%) participated in this study. At university lectures, questionnaires were distributed to students who had previously agreed to the request to participate in the investigation. The main contents of the questionnaire were: Face sheet, the Subjective Eating Well-Being Scale, the Sense of Subjective Well-being Scale (Ito, Sagawa, Ikeda & Kawaura, 2003), and the Quality of Life Scale.

*Results:* Exploratory factor analysis with varimax rotation was conducted on the 45 items of the Subjective Eating Well-Being Scale. As a result, 26 items were adopted and classified into 4 factors including "Eating environment," "Feeling of eating," "Substantiality of eating," and "Cooking Methods." The analysis also revealed a significant correlation between the four factors of the Subjective Eating Well-Being Scale and the Sense of Subjective Well-being Scale. Similar results were obtained when the relationship between the Subjective Eating Well-Being Scale and the Quality of Life Scale was analyzed (Table 1).

*Conclusions:* In this study, the reliability and validity of the Subjective Eating Well-Being Scale was analyzed. The scale can be used to measure the well-being of eating. As the results are limited to university students, an investigation among high school student populations may be necessary.

**Table 1.** Result of correlation analysis of four factors

	<b>Eating environ- ment (<math>\alpha=.833</math>)</b>	<b>Feeling of Eating (<math>\alpha=.847</math>)</b>	<b>Substantiality of eating (<math>\alpha=.723</math>)</b>	<b>Cooking methods (<math>\alpha=.785</math>)</b>
The Sense of Subjective Well-being Scale ( $\alpha=.833$ )	.380**	.479**	.409**	.197*
Quality of Life Scale ( $\alpha=.919$ )	.151	.507**	.430**	.042

\* $p<.05$ , \*\* $p<.01$

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## More Tweets, More Well-being? A One-Week Micro-Blogging Intervention Study

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**Keywords:** well-being, social media, twitter, social connectedness, loneliness

*Background:* The social life has evolved from face-to-face interactions to online interactions. For researchers, understanding the psychosocial consequences of communication through online media is a hot topic. Recent research showed that the use of social networking sites (e.g. Facebook) is positively associated with sense of belonging in close relationships [1], social support [2], and wellbeing [3]. However, there are also studies which failed to find a significant relationship between social media use and wellbeing [4] and even no relationship [5].

*Aim:* The present study aimed to understand the extent to which a micro-blogging activity, tweeting, is associated with social connectedness, psychological wellbeing, and loneliness.

*Method:* An internet-based field research with pre- and post-test control group design, inspired by the design of a previous study examining the effect of Facebook on wellbeing [6], was performed. Participants (Male = 26, Female = 84) in the experimental group ( $n=55$ ) were asked to tweet more frequently than they usually do, whereas participants in the control group ( $n=55$ ) received no such instruction and were informed that the study was about social media use and wellbeing. Prior to intervention, Beck Depression Inventory were sent to the participants for screening purposes. Those who scored 19 or above were not invited to further steps. Tweeting activity of the participants was monitored through a Tweet account created specifically for the purpose of this study. Each participant's average number of tweets within the past two weeks was calculated in order to be sure that the manipulation was successful. Participants responded to scales measuring social connectedness, psychological wellbeing, loneliness before the intervention, a week and a month after the intervention ended. Participants were also required to provide the occurrence of any significant life events during the one-week intervention period. There was no significant gender effect on wellbeing, and no significant difference between the wellbeing level of experimental and control groups.

*Results:* Results of a mixed-method ANOVA revealed a significant interaction effect for wellbeing ( $F(1, 108) = 6.83, p < .05$ , partial  $\eta^2 = .06$ ). However, there was no significant main effect or interaction effect in social connectedness and loneliness scores of participants in either of the groups. This result indicated that, participants in the experimental group had significant improvements in wellbeing while participants in the control group did not.

*Conclusions:* Tweeting frequently within a one-week period significantly increased psychological wellbeing of participants whereas it had no significant effect on social connectedness and loneliness. Although we also expected significant changes in social connectedness



and loneliness, it could be argued that people may satisfy different psychological needs via different social networking sites and the way each media influences wellbeing may differ [7]. Study reveals the psychosocial influence of social media in terms of wellbeing and socialization. Further studies should investigate mediating variables in this relationship.

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## Transdiagnostic Intervention from Positive Psychology Approach in A Social Anxiety Case

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**Keywords:** social anxiety, transdiagnostic intervention, positive psychology, mindfulness, case study

*Background:* Social anxiety has been defined as an intense fear displayed in social situations in which the person anticipates that he or she will be evaluate or even judge by his/her performance. The anxiety produced by these situations, combined with the disruptive behaviors associated, such as checking behaviours, explanatory behaviors and avoidance, produce a great interference in person's everyday life.

*Aim and Method:* The work aims to show a clinical intervention in a social anxiety case, a forty-three-years-old woman. A 12-session of cognitive-behavioural treatment was designed, complemented with positive psychology techniques, whose objectives were: a) reduce anxiety and perceived stress; b) reduce checks and justifications; c) increase assertiveness; d) decrease emotional suppression and increase cognitive reappraisal; e) increase self-esteem, and f) improve their social circle.

*Results:* As a result, a reduction was obtained in social anxiety, state anxiety, perceived stress, emotional suppression, and justifications, and we found a clinical increase in self-esteem, optimism, cognitive flexibility, and assertiveness.

*Conclusions:* Therefore, we consider that the integration of positive psychology techniques in a well-established cognitive-behavioural treatment could be undeniably relevant to promote changes quickly.

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## The 2016 U.S. Presidential Election: Impact on Meaning in Life and Mood

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**Keywords:** meaning in life, positive affect, negative affect

*Background:* Some evidence suggests that negative life events can have a profound impact on people's sense of meaning in life [1], whereas other findings point to long-term stability of meaning in life with temporary oscillations due to shattering events [2,3]. The 2016 U.S. presidential election provided a unique opportunity to study the impact of situations on people's affect and global evaluations of meaning in life, accounting for their political leanings. It was hypothesized that voters would experience a boost (winning voters) or decline (losing voters) in mood and meaning immediately after Election Day and return to baseline levels of presence of meaning after some time; however, due to the highly charged nature of the 2016 election, we hypothesized that the length of the study post-election (two weeks) would be insufficient for participants' mood and meaning to return to baseline.

*Aim:* To examine the impact of the 2016 presidential election on meaning in life and affect.

*Method:* Participants included 47 undergraduate students at a large university in the Rocky Mountain region (69% women, 73% Caucasian, 63% middle class) with a mean age of 19.10 (SD = 2.26). Of the 47 participants, 41% identified as Democrat, 21% Republican, 8% Libertarian, 1% Other, and 24% non-affiliated. 57% reported planning to vote for Clinton, 19% for Trump, and 24% for other candidates. Only data from Clinton and Trump voters were retained. Participants completed a set of measures on a daily basis, assessing affect and meaning in life [4].

*Results:* Data consisted of 985 daily reports. Participants reported mean daily presence of meaning scores of 10.26 (SD=3.06), daily mean PA scores of 27.25 (SD= 9.41), and daily mean NA scores of 19.23 (SD=8.19). The aggregated ratings of Clinton and Trump voters are plotted across the 21 days of the study in Figure 1, with election day occurring on day 8. Hierarchical linear modeling [HLM v6.02;5] was used to formally test the trajectories of these variables. For each outcome variable, we first tested a "simple model" in which a linear coefficient representing the day of completion of daily reports was entered at Level 1. In the second analysis, we tested a "moderated model" in which participants' voter intentions (Clinton vs. Trump) were entered at Level 2. There was no significant linear trend for positive affect, nor was there any significant moderator effect of the Level 2 variable on the linear trend (all  $ps > .46$ ). The linear trend for day of completion on meaning in life ratings approached significance ( $\gamma = .02, p = .07$ ) in the simple model; however, there was no significant linear trend, nor was there a significant moderator effect (all  $ps > .43$ ). Thus, meaning in life neither increased nor decreased throughout the study for either Clinton or Trump voters. For NA,

the linear trend for day of completion was significant in both the simple ( $\gamma = -.01, p < .001$ ) and moderated models ( $\gamma = -.02, p < .001$ ), as was the moderator effect of voter intentions ( $\gamma = .01, p < .001$ ). Across aggregated voters, negative affect declined significantly across the study; however, while negative affect declined substantially for Trump voters, it increased for Clinton voters.

*Conclusions:* Overall, voter intention was not a significant predictor of the intercept for positive affect, negative affect, or meaning in life, which can be interpreted to show that Clinton and Trump voters had statistically similar average daily ratings on mood and meaning across the three weeks of the study. To the extent that either Clinton or Trump voters did experience a shift in meaning, the trajectories indicate that they returned to baseline levels of meaning within two weeks post-election. Such findings suggest either that presence of meaning is fairly robust and not lastingly affected by surprising events, or that people are able to quickly recover their sense of meaning in life following a surprising event. Clinton voters did however maintain mildly increased levels of negative affect, whereas Trump voters reported a significantly decreasing levels of negative affect post-election.

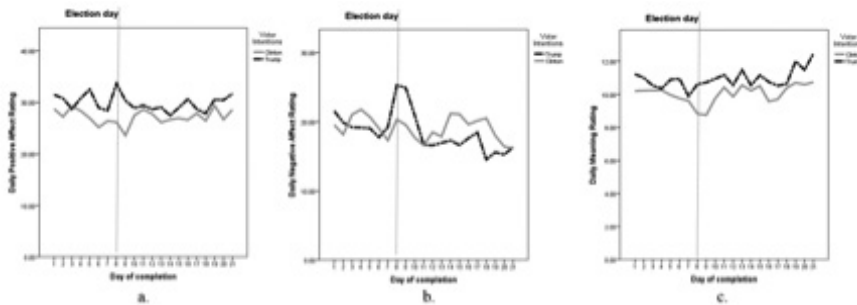


Figure 1.

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## **Proactive Behaviour of University Students: Strengths Use and Deficit Improvement Behaviour and the Relationship in the Nomological Net**

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**Keywords:** strengths use, deficit improvement, university students, well-being

*Background:* It is well known that studying at university can be very challenging and stressful for students. While some students mainly depend on the university to assist them through this time, other students prefer to proactively manage this stressful period on their own through focusing on their strengths and developing their areas of weakness. Two new scales measuring proactive behaviour towards strengths use and deficit correction have recently been developed for employees [1] and applied to the context of students [2]. Strengths use behaviour refers to the initiative that individuals may take to use their strengths at work or in their studies. In a similar way, individuals might take the initiative to develop their weaknesses (or correct their deficits). Since this conceptualisation of proactive behaviour in terms of strengths use and deficit correction is relatively new, the relationships of these constructs with other constructs in the nomological net are largely unexplored, specifically among university students.

*Aim:* The aim of this study was to test how two new types of proactive behaviour namely strengths use and deficit correction, relate differently with variables in the nomological net (including study demands, study resources, personal resources, personality, meaning making, burnout, engagement, fit with study-course, study satisfaction, life satisfaction, well-being and intention to drop out).

*Method:* Three cross-sectional samples of South African university students were used to test different relationships (Sample 1:  $N = 779$ ; Sample 2:  $N = 512$ ; Sample 3:  $N = 773$ ). The sample included university students of different faculties and language groups (primarily Afrikaans, English, Setswana and Setsotho) between ages 18 and 25 on three different campuses, one a rural-based campus. Structural equation modelling was utilised to examine the relationship between students' strengths use and deficit improvement behaviour and other important variables in the nomological net.

*Results:* Strengths use and deficit correction behaviour were both significantly related to all variables included in the nomological net. However, the strength of the relationships differed for strengths use and for deficit correction. In some cases, strengths use had a stronger relationship with a specific variable compared to deficit correction behaviour, and in other instances it was the other way around. For example, the beta coefficient of the path between strengths use behaviour and engagement was 0.24, while the beta coefficient of the path between deficit correction behaviour and engagement was 0.34, a much stronger relationship. Another example is the relationship with life satisfaction, where the beta coefficient of strengths use behaviour was 0.38, while the beta coefficient of deficit correction behaviour was 0.16, a significantly weaker relationship.

*Conclusions:* Strengths use and deficit correction behaviour have significant relationships with important variables in the nomological net of university students, although the strength of these relationships varied. Students will experience favourable outcomes from proactively using strengths and developing their weaknesses, including reduced burnout and enhanced engagement, life satisfaction, and wellbeing. Universities and lecturers can be informed, which allows them to develop support structures and provide students with opportunities to apply their strengths and develop their deficits.

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## Nurses Perception of Flow Experience through Kawa River Model

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**Keywords:** Kawa river model, flow theory, interview.

*Background:* In the context of flow theory, individuals can give themselves up to the task they are doing entirely by challenging their own performance in a relatively challenging task by working on feedback, and as a result they can reach an optimal experience. The following characteristics can emerge in a subjective flow experience; focusing on the work intensively, the disappearance of consciousness that resonates with the ego, the thought that one can control his actions and unawareness of the time [1]. The Kawa river model is a functional technique for both rehabilitation and intervention, providing a flow of the river that shows how the individual struggles with the challenges he encounters and his strength sources. In this model, the use of metaphors such as rivers, rocks, driftwood, river side-walls can be exploited by means of drawings [2]. It is thought that a flow experience can be metaphorically expressed through Kawa River model.

*Aim:* The purpose of this study is to demonstrate a flow experience of the nurses working in the neonatal intensive care unit through the interviews benefiting from the Kawa river model. It is also aimed to reveal the meanings of their flow experiences both including the past, the present and the future.

*Method:* The data of the study were collected through a semi-structured interview form and 4 females and 2 males as a total of 6 nurses participated the research. Age average of the participants is 21.33 and working period of them ranges from 6 months to 4 years. The questions directed to the participants are; a) A moment in your professional life that was an experience that you focused entirely on your work, forgot the time, had a clear purpose, and challenged your skills. Imagine that this moment was just like a river, you can draw a picture that shows the challenges you encountered, how you got along and how the river's flow was. You can use the metaphors as the rock, driftwood, river side-walls. b) When you think about this experience now, how is the image of the river in your mind and how does the rock look like? c) If there was a flow experience that you can experience in the future, what would it be? How would the view of the river be like?

*Results:* Content analysis has been used for the analysis of this study. Researchers have codified the concepts of the text repeatedly. Subcategories of the concepts have been created via bringing the similar concepts together. After this process, the frequencies of the subcategories for the related questions have been determined.

According to the findings, the following subcategories of the river flow velocity have emerged regarding the past flow experience; “both rapid and slow flow” (n=2), “rapid flow” (n=3). In addition to those the following subcategories of flow experience have emerged;

“a moment of the intervention over the baby” (n = 4), “a moment of the physical contact of the baby” (n = 1), “a moment about the first day of the occupation” (n=1). The emotion subcategories of the flow experience have been revealed as “feeling of being in the moment” (n=3), “self-esteem” (n = 1), “nervousness” (n = 1), “feeling of focus” (n = 1) and “curiosity of learning” (n = 1). The most prominent subcategories related to the current mental perception of the flow have been emerged as “the rock itself becomes a source of power” (n = 3) and “the belittled rock” (n = 4). Following subcategories of a future flow experience have emerged; “an imagination of the intervention over baby” (n = 2), “a flow moment about the career” (n = 2), “a conversion of the river’s image” (n = 1) and “private life imagination” (n = 1).

*Conclusions:* As a result, various findings were found based on interviews about the perceptions of flow experiences of nurses using Kawa river model. Moreover, the nurses have stated that they have obtained the holistic view and the sense of comfort about their occupation life through this activity.

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## Angel Investors' and Startup Founders' Psychological Capital Impact on Their Partnership Quality – A Pilot Research

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**Keywords:** psychological capital, angel investor, startup entrepreneur

*Background:* In the last decades there was a worldwide explosion in the number of newly founded startup companies, whom most important external financing source coming from are angel investors.

Angel investor is a wealthy individual, who invests his/her own funds in early stage companies. Next to money, angels have a significant value added impact on the invested company development e.g. management expertise. They have more direct and personal relationship with entrepreneurs compared to other kind of investors. Startup entrepreneur is a founder of an innovative, mainly technology-based company in its early life cycle, with very scarce resources under management. Startups have exponential, global growth potential and scalable business model.

*Aim:* There are a very few research papers available about the startup founders' and angel investors' cooperation. Some researchers examined *trust* [1] and *power* [2] between the parties. Recent study focuses on the relation between the angel investors' and the startup entrepreneurs' positive psychological capital (PsyCap) [3] and their partnership.

*Hypothesis:* H1: Angel investors' PsyCap has a significant positive correlation with their perception on the quality of their partnerships with startup entrepreneurs. H2: Startup entrepreneurs' PsyCap has a significant positive correlation with their perception on the quality of their partnerships with angel investors.

*Method: Sample:* angel investors: N=8 | Age: 30-75, startup entrepreneurs: N= 8 | Age: 23-65

Metrics: 24 items psychological capital questionnaire [PCQ\_24] Hungarian self-rater version, evaluated on 6 grade Likert-scale.

Asking entrepreneurs and angels: “Evaluate the partnership with your angel investor/ startup entrepreneur”. Answers are evaluated on 5 grade Likert-scale,

*Results:* On-going research. By the time of the conference there will be presentable findings.

*Limitations:* Very small number of angels underdeveloped investment culture in Hungary.

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## Meta-Analysis of Short-Term Psychophysiological and Emotional Effects of Video Game Play

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**Keywords:** emotion, autonomous nervous system, video game, leisure activity

*Background:* In 21st century post-industrial societies, most people turn to entertainment media to “recharge the batteries” drained by daily stress. However, there are several unanswered questions about media induced stress recovery. One issue is that humans can successfully recuperate from leisure activities that are thrilling and can possibly invoke negative feelings – therefore eliciting further stress –, such as watching a frightening movie or playing a mentally challenging video game [1]. Current theories of stress recovery are not fully able to explain this phenomenon [2].

*Aim:* This study aimed to elucidate emotional and psychophysiological processes during interactive media use, to gain better understanding about interactive media induced recovery. We investigated the sympathetic and parasympathetic arousal components separately, as those are associated with different physiological coping mechanisms [3].

*Method:* We conducted a meta-analysis, using a protocol based on the PRISMA-P checklist. We aggregated findings from previous studies that investigated emotional and biological reactions in humans playing commercial video games. We included a wide range of studies using different games (by genre, rating, violence level, gaming mode) gaming contexts (opponent type, competitive setting) and participant characteristics (age, gender, ethnicity, BMI).

*Results:* Literature search of four electronic databases and references of two previous meta-analyses identified 2430 potential studies, and the screening yielded 212 studies that matched the inclusion criteria. Preliminary findings indicate that games elicit a psychophysiological response that increases sympathetic and decreases parasympathetic activity – reminiscent of active physiological coping response [4]. The majority of game genres were associated with increase in positive emotional states – such as joy, involvement, and flow – and decrease in negative emotional states – like anxiety and sadness. Emotional responses did not differ for participant characteristics, but there was a difference in game characteristics.

*Conclusions:* The findings indicate that video games can provide challenging and positive emotional experience.

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## Testing the Flow State Questionnaire among Hungarian windsurfers

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**Keywords:** Flow State Questionnaire, absorption, balance, windsurfing

*Background:* The commitment has become a key research topic in sport psychology in the last few years, exploring whether sportsmen experience self-actualization and flow while pursuing the activity. In the recent decades, there has been an emergence of studies analyzing flow experiences both from qualitative and quantitative aspects [1,3,5]. At the same time, there is a growing attention toward those physical activities that aim to set up greater challenges for participants with different skill levels [2,4]. Windsurfing in its complexity constitutes a subculture, in which the major dimensions of flow and embodied experience have never been studied so far.

*Aim:* Based on the contemporary literature the present paper focuses on the windsurfing community in Hungary and attempts to measure flow during windsurfing by testing the recently developed flow state questionnaire PPL-FSQ [3]. Furthermore, factors of demographics, travel habits, social conditions of the given sport experience, and the characteristics of the sports, such as skills, sport specific challenges, goals in sport, prevalence of practice and their interrelation with flow were investigated in the context of Hungarian windsurfers.

*Method:* Data were collected in a large sailing center in Hungary at the southern shore of Lake Balaton. The target group of the survey was water-based sportsmen based on a purposive sampling. In total 93 questionnaires were completed. Flow was measured by the PPL-FSQ [3]. The questionnaire consisted of 20 items that measures different aspect of the flow state using a 5-point Likert type scale. The scores for the two dimensions were summed to give each participant an overall score for the variable of flow. SPSS 15.0 was used in the calculations, with a maximum significance level of 0.05. After displaying descriptive statistics, independent t-test, one-way ANOVA were employed.

*Results:* The results contributed to the testing of a recently developed research instrument in the quantitative measurement approach of flow experiences in a special sample and context. The validity of the the basic meta-dimensions of flow was confirmed by the *Results*: Furthermore, the research intended to unfold the major predeterminants of the flow state in order to get a deeper understanding of this special population. Some demographic variables and fundamental features of windsurfing indicated significant differences in flow dimensions. Social conditions and the social context of the activity demonstrated a high importance in experiencing flow.

*Conclusions:* The findings only partly corresponded with other researches in similar life-style sports' regarding flow experience. As a conclusion of the research, it can be stated that flow can be experienced differently even by a homogenous sample. In the future, qualitative researches should be conducted to obtain deeper understanding of the influencing factors of flow experience of windsurfers and additional water-based sports.

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## **Study of Relationship between Optimism, Humor and Life Orientation with Subjective Well-being among College Students**

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**Keywords:** optimism, humor, life orientation, subjective well-being, students

Aim of this study was to investigate the relationship between Optimism, Humor and Life Orientation with Subjective Well-being among college Students. The study sample was 380 male and female students that selected via random stratified sampling method. Data gathered by Optimism, Humor, Life Orientation and Subjective Well-being questionnaires. The results showed there is a significant relationship between Optimism, Humor and Life Orientation with Subjective Well-being. Also, according the results  $R$  is 0.47,  $R^2$  0.22 and adjusted  $R^2$  0.11. In the other words, the study model explained about 21 percentage of criterion variable variance. Beta coefficients of Optimism, Humor and Life Orientation were 0.26, 0.11 and 0.32 respectively. Totally, the results confirmed the role of positive psychology constructs in predicting subjective well-being.

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## The Relationship between Negative Aspects of Personalities and the Sense of Happiness

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**Keywords:** Dark-Triad, dependency, happiness

*Background:* In recent years, studies have been developed on the senses of happiness. The sense of happiness is considered to be determined by psychological aspects and subjective judgments of individuals. Studies have been conducted on the relationship between the sense of happiness and various personality tendencies. On the other hand, the relationship with negative aspects of personalities have not been examined so much yet. For instance, it is meaningful to examine the senses of happiness of the people who are generally considered to be problematic such as the people with “Dark-Triad” (Machiavellianism, narcissism, and psychopathy) (Tamura et al,2015) or dependency in order to examine the sense of happiness from various perspectives.

*Aim:* Then, this study examines the relationship between the sense of happiness, Dark-Triad, and dependency tendencies. At the same time, not only the subjective sense of happiness but also the one placing importance on interpersonal relationships are examined.

*Method:* A questionnaire survey was conducted of 101 university students (Men: 37%). The following 4 scales were used; Process Dependence Scale (Fujii, 2016), Japanese-version Short Dark Triad (Shimotsukasa et al, 2017), Subjective Happiness Scale (Ito et al, 2003), Independent Happiness Scale (Uchida, 20114).

*Results:* First of all, correlation was sought between 2 scales of the Subjective Happiness Scale and Independent Happiness Scale that are the scales of the sense of happiness and 6 subscales of gambling dependency, TV dependency, PC dependency, cell-phone dependency, electronic games dependency, and shopping dependency that are the subscales of the Process Dependence Scale. As the result, a negative correlation ( $r=.214, p<.001$ ) was observed between the PC dependency and the Subjective Happiness Scale. Also, respondents were classified into the high and low groups with the average score of narcissism that is a subscale of the Dark-Triad as a criterion, and as the result of conducting a t-test of the scores of Subjective Happiness Scale and Independent Happiness Scale of each group, the scores in the Independent Happiness Scale were significantly higher in the high group of narcissism ( $r=.022, p<.001$ ).

*Conclusions:* As the result of this study, those who showed the “PC dependency” tendency tended to show low subjective happiness. This is assumed to be because the people dependent on PC have less contact with real people. Also, those who showed the high narcissism tendency tended to score high in the Independent Happiness Scale. This is assumed to be because the people with narcissism are taking things in a self-centered manner, so they are likely to feel happiness as their own senses irrespective of others.



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## Three Concepts about The Happiness of Japanese People -“Unhapless”, that is, without Hapless-

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**Keywords:** happiness, positive psychology, culture

*Background:* "We predict that positive psychology in this new century will allow psychologists to understand and build those factors that allow individuals, communities, and societies to flourish" [1]. In fact, various studies on sense of happiness have been done. In the sense of happiness, considering about the cultural difference is important. The meaning of happiness has intrigued many philosophers and practitioners, in both the West and East and of the past and present [2]. In terms of happiness, Japan can be considered a very special country. Although Japan's economic indices such as GDP and GNP are high, the high happiness scores are not shown in previous investigations. This is not the result of being discrepant to the high prevalence of depression and suicide. However, it is important to carefully consider whether the existing happiness scales appropriately reflect the Japanese people's "happiness" and "social well-being."

*Aim:* This study aimed to generate concepts about "happiness" concerning Japanese people using a bottom-up approach.

*Method:* Data of 400 persons living in Japan were collected through a web-based investigation. We made arrangements to ensure homogeneity in terms of residential area, gender, occupation, and age. The question "What is happiness for you?" was asked, and a free description was sought in reply. First, the obtained data were classified by three psychologists using the KJ method. Second, when considering the content of the descriptions for each group classified, it was confirmed that three kinds of concepts could be considered as happiness orientation. Third, based on the orientation of each group, three concepts were generated about the happiness of Japanese people.

*Results:* The happiness of Japanese people was categorized into "get," "keep," and "avoid" using the bottom-up approach. "Get" is the sense of happiness in acquiring new things and situations and is close to the concept of happiness provided by previous studies. "Keep" is people's wish to maintain their current situation, and "avoid" is their desire to prevent unfortunate events. Moreover, it was confirmed that there were no age and sex differences in these three concepts.

*Conclusions:* "Keep" and "avoid," in particular, reflect the view of Japanese people's happiness, and it seems that the subjects showed a sense resembling "unhapless." "Unhapless" means a state in which people wish to avoid becoming unhappy. These concepts are also considered important in the fields of clinical psychology and positive psychology. Future

studies could explore assessment tools to measure Japanese people's happiness based on the result of this study, and practical implications for clinical psychology and positive psychology need to be discussed.

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## In Defense of Pessimism: Harnessing Negative Emotions to Persist on Challenging Goals

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**Keywords:** negative emotions, defensive pessimism, persistence, goal-pursuit

*Background:* Goal avoidance is the typically observed response to future events that are anticipated with negative emotions such as fear of failure and anxiety. This has resulted in a wide range of emotion regulation strategies and therapies aimed at restructuring unhelpful thinking and reducing the experience of negative affect. However, individuals respond differently to emotional signals and so basing these strategies on the assumption that negative emotions always hinder goal-pursuit can reduce their efficacy. Defensive Pessimists represent a group of individuals who unlike the norm, harness their negative emotions in the process of goal-pursuit and disengage from the goal if deprived of the opportunity to do so. This suggests that these individuals may not benefit from commonly applied emotion regulation techniques in which negative emotions are viewed as unhelpful.

*Aim:* The aim of the current study was to investigate the effect of an Acceptance manipulation on defensive pessimists' persistence in goal-pursuit.

*Method:* Participants in the experimental condition were instructed (via voice recording) to accept any negatively experienced thoughts and feelings prior to completing a Remote Associates Task consisting of ten difficult items. Defensive pessimists in the control group were not given any instructions on how to manage their thoughts or emotions regarding the upcoming task. Persistence was measured using reaction time on number of items withdrawn from.

*Results:* As expected, results indicated that defensive pessimists in the Acceptance condition were quicker to withdraw than the control group, suggesting that defensive pessimists need access to their negative emotions on difficult tasks.

*Conclusions:* This finding lend further support for the beneficial role of negative emotions, such as fear of failure, in goal-pursuit; not only as a motivator of action but also as a drive to persist in the face of challenge. Results have important implications from a practical and theoretical standpoint. To start, it highlights the need to consider individual differences in for example, emotional preferences, both in the application of therapies (e.g. Acceptance based) and also in the assessment of their effectiveness. Furthermore, widening the perspective of emotions as potential means to a desired end will open doors to new avenues of research that may ultimately require an abandonment of labels (i.e. good, bad, positive, negative) currently attached to emotions that purely reflects their hedonic tone.

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## **Positive Intervention for High School Teachers in Japan: A Preliminary Study**

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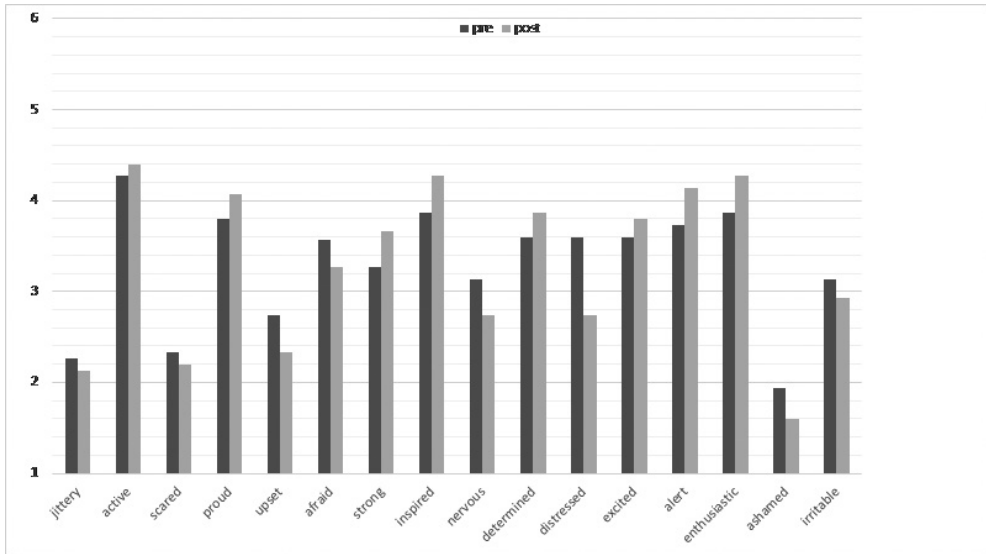
*Background:* The working environment of Japanese high school teachers is severe. Their average weekly working hours are 54 hours, and they teach 15 classes per week. Among 7757 teachers that took sick leave in 2016, 63% were for mental illness. Moreover, 352 teachers resigned from their jobs because of mental illness (Ministry of Education in Japan, 2017). We must not only change the working environment but also offer preventive psychological interventions to solve this problem.

*Objectives:* This study was a preliminary examination of the effects of a positive intervention for mid-career high school teachers.

*Method:* Participants were 15 high school teachers working for private high schools in the Hyogo prefecture of Japan. Their median age was 38 years, and their median experience as teachers was 13 years. School principals invited the participants to attend a 2-day mid-career seminar conducted for teachers. A half-day positive intervention program was conducted as a part of this seminar. The program included lectures on teachers' stress, various stress coping exercises that were mainly based on the cognitive-behavioral approach, as well as finding and utilizing strengths in pairs, and dyad and discussions. The Positive Negative Affect Schedule (PANAS) was used for assessment and to provide feedback for the participants.

*Results:* Participants' average total life satisfaction score was 6.96, and the job satisfaction score was 7.20 out of a total of 10. Participants believed that their strengths were cooperativeness; playfulness, resilience, and being principled, whereas thoughtfulness, flexibility, decisiveness, and humor were strengths that they wanted to develop. The results of a t-test indicated that the mean negative affect score of PANAS decreased significantly after the intervention (before =22.6, after = 19.9,  $t=2.49$ ,  $14df$ ,  $p=.026$ ), and positive affect such as enthusiasm ( $p = .054$ ) and inspiration ( $p = .054$ ) tended to increase.

*Conclusions:* The results indicated that the positive intervention program for school teachers was effective in decreasing negative emotions and increasing positive emotions. Further research is necessary to validate these findings by using larger samples and for assessing long-term effects.



n=15

Figure 1. Average scores for PANAS before and after the intervention.

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## **Absolutely Perfect?– Magnifying Glass on Perfectionism – Prevention and Treatment Proposal**

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Perfectionism is a possible cause of increasing discomfort, stress, worry, insecurity, low life satisfaction, and poor mental health among young women in the age group 16-24 years. This article puts the perfectionist tendencies under the spotlight with focus on maladaptive perfectionism. Maladaptive perfectionism is associated with the development of mental health problems of varying degrees and linked to destructive patterns of anxiety, depression, and risk of suicide. In the article, definitions of perfectionism and its symptoms and causes are given. Based on research findings, an educational psychological mental health framework for how maladaptive perfectionism can be prevented and treated is proposed. The framework is directed for use in secondary and higher educational settings as a combined evidence-based and evidence-informed intervention with the aim of lowering unhealthy high standards, but also aimed at promoting more positive reactions from the perfectionist when trying to live up to ideals. This focus on reducing negative responses is consistent with the development of clear and emotional self-regulatory skills that can act as buffers. Finally, the proposed framework is discussed and critiqued.

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## Helping students to PROSPER: a Measure for Student Well-being

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**Keywords:** student well-being, measurement, education, positive psychology

*Background:* The goal for positive psychology is to bring scientific rigour to the strategies that will help individuals, groups, organisations and communities to thrive and flourish. The aim of positive education is to draw on the science of positive psychology to inform school practices so all students thrive and flourish. The challenge in positive education is to ensure that the strategies that draw on the science of wellbeing can be effectively integrated with evidence based teaching and learning practices to help students to thrive and succeed academically, socially and emotionally.

*Aim:* The aim of this research is to develop and compare a measure of student wellbeing for primary school aged children based on Seligman's (2011) PERMA framework with a new measure of student wellbeing based on the PROSPER framework for wellbeing in individuals, groups, organisations and communities used in the Bounce Back program (Noble & McGrath 2015). The PERMA measure assesses student wellbeing in general terms on 5 variables (positive emotion, engagement, relationships, meaning, and accomplishment). The PROSPER tool measures 7 school-specific variables (positivity, relationships, outcomes, strengths, purpose, engagement, and resilience) specifically in the school context. These 7 variables were designed to guide educators' practices to improve their students' wellbeing at school.

*Method:* This study compares two tools to measure wellbeing variables for primary aged Australian students ( $N=219$ ), Grades 3 to 6. The students were drawn from 5 rural schools participating in a project jointly funded by the Faculty of Health Sciences at Australian Catholic University and a rural community charity (Where There's a Will) measuring the impact of the Bounce Back wellbeing and resilience program on student wellbeing.

*Results:* Confirmatory factor analysis supported all 12 wellbeing variables. The importance of introducing positive education from the early years of schooling is indicated by the data showing a decrease in student wellbeing in Grade 5 in most variables and in 10 of 12 variables in 6th grade.

*Conclusion:* A clear goal of positive education is to integrate the science of positive psychology into school practices to facilitate the mental health and wellbeing of students and their academic engagement. The items for the PROSPER measure of student wellbeing were specifically designed for the school context to indicate to educators the school practices they could implement to improve student wellbeing. The importance of such a measure is indi-



cated by the results that show that even by Grade 5 there is a decrease in student wellbeing. Such data shows the importance of early prevention from the first years of schooling to help maintain robust student wellbeing throughout the primary years of schooling and beyond.

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**Forgiveness: How it Manifests in our Health, Well-Being and Longevity***Kathi Norman*

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Forgiveness is a character strength and process that, when practiced, is associated with improved psychological well-being, physical health outcomes, and longevity. Forgiveness can serve as a protective factor that buffers against poor health and psychological consequences. Common misconceptions about forgiveness can serve as barriers to the desire to cultivate this protective strength, as forgiveness is often conflated with permissiveness, and perceived as permission for a transgressor to engage in hurtful conduct. The benefits of forgiveness, however, are most significant for the individual who has been transgressed, rather than the transgressor. Failing to forgive, or unforgiveness, is the practice of engaging in ruminative thoughts of anger, vengeance, hate, and resentment that have unproductive outcomes for the ruminator, such as increased anxiety, depression, elevated blood pressure, vascular resistance, decreased immune response, and worse outcomes in coronary artery disease. Practicing forgiveness enables the transgressed individual to reduce their engagement in rumination thus reducing their experience of anger, resentment, and hate. Forgiveness, then, is a pathway to psychological well-being and health outcomes.

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## A Pilot Test of a 6-Week Meaning in Life Intervention: Preliminary Results and Implications

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**Keywords:** meaning in life, intervention, pilot

*Background:* Experiencing meaning in life has long been considered a cornerstone of psychological wellbeing [1]. People who experience their lives as meaningful are more likely to be satisfied with their lives, are more optimistic, are more likely to experience positive affect, and are less likely to feel depressed, hopeless, and anxious; for a review, see [2]. Contemporary scholars have suggested that meaning is comprised of three facets: comprehension (understanding of one's life, the surrounding world, and one's place within the world), purpose (a sense of having overarching goals and directedness in one's life), and significance/mattering (evaluation of one's life as valuable and worthwhile) [3,4,5]. Despite the abundance of evidence on the benefits of meaning in life, most meaning interventions to date have focused on brief, coherence-focused activities [6] or have targeted a highly specific population, such as those diagnosed with cancer [7]. The current intervention was designed to focus on uniting the comprehension and purpose aspects of meaning, while allowing participants to imbue their own significance through guided reflection and self-exploration.

*Aim:* To examine the effects of a 6-week meaning in life intervention on mood, mental health, psychological wellbeing, and physical health

*Method:* A 6-week, 50-minute per week, group meaning in life intervention was piloted in the current study. The six modules were delivered in consecutive weeks by two trained facilitators in a classroom setting. Topics and activities included making meaning through music, photo-sharing, savoring, strengths and values identification, a mission statement, and action-planning [see Figure 1 for an overview]. In the current study, group sizes ranged from four to nine participants. Participants included 40 undergraduate students at a large university in the Rocky Mountain region (85% women, 87.5% Caucasian) with a mean age of 18.68 (SD = 1.42) Participants completed a set of measures related to mood, mental health, psychological wellbeing and health prior to the 6-week intervention (pre-test) and immediately after completion of the intervention (post-test).

*Results:* Participants reported levels of presence of meaning, search for meaning, stress, anxiety, depression, emotion regulation, mindfulness, negative and positive affect, satisfaction with life, and physical health prior to, and immediately after, the 6-week intervention. SPSS version 24 (IBM, 1989-2016) was used to perform paired samples t-tests to assess mean differences prior to and post-intervention. The main hypothesis was supported as presence of meaning increased ( $t(39) = -2.03, p = .049$ ). Consistent with hypotheses, stress ( $t(38) = 3.25, p = .002$ ), anxiety ( $t(38) = 3.17, p = .003$ ), and depression ( $t(38) = 2.06, p = .047$ ) decreased. Cognitive reappraisal aspects of emotion regulation increased ( $t(38) = -2.88, p = .007$ ). Increases

in mindfulness ( $p=.068$ ) and decreases in negative affect approached significance ( $p=.099$ ). There were no mean differences on search for meaning ( $p=.606$ ), emotional suppression aspects of emotion regulation ( $p=.82$ ), satisfaction with life ( $p=.43$ ), positive affect ( $p=.98$ ), or physical health ( $p=.75$ ).

*Conclusions:* Initial pilot results suggest participants experienced increases in presence of meaning and cognitive aspects of emotion regulation and decreases in stress, anxiety, and depression after a 6-week group intervention focused on bolstering meaning in life. There were no observed differences in search for meaning, emotional suppression aspects of emotion regulation, satisfaction with life, positive affect, or health. Although initial results from the pilot test are promising, we remain highly cautious in our interpretation of these initial data. Future studies of this intervention would benefit from the use of a control group, to rule out the influence of time or other factors, and multiple time point data collection, to assess stability of effects.

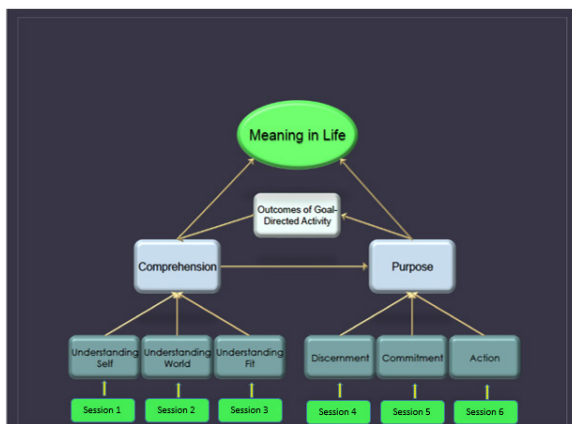


Figure 1.

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## **Measuring and Modeling Individual Differences in Psychological Well-being Via Ecological Momentary Assessment**

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In this talk, I will introduce E-PERMA, a measurement instrument that can capture the five elements of Seligman's PERMA model of well-being (Seligman, 2012) in ecological momentary assessment (EMA) study settings. In EMA studies, participants provide in-the-moment assessments of their psychological states several times a day, typically over the course of weeks. Such data provides an ecologically valid representation of people's everyday life experiences. I will show how EMA data, collected with E-PERMA, can be modeled in the state-space modeling framework to quantify meaningful day-to-day fluctuations, that is intra-individual variability, in psychological well-being. I will present findings from an EMA study in which participants (N = 160) were prompted to give momentary assessments on their psychological well-being via E-PERMA six times a day for two weeks. We found strong relationships between intra-individual variation in PERMA elements and levels of overall flourishing and personality characteristics. I will also show how the E-PERMA measures were used to monitor the effect of positive psychology interventions in the same study.

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## Positive Psychology and Character Strengths in Teaching English as a Second Language as Experienced by Students and Teachers

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**Keywords:** positive psychology, character strengths, teaching English as a second language, intervention study

*Background:* The study to be carried out aims to introduce the concepts and practices of positive psychology to the teaching of English as a second language (L2) in Finland, and to find out to what extent pupils' learning of English is fostered by the teacher's use of them in her teaching, in terms of perseverance and resilience, participation in class, development of growth mindset and atmosphere in the classroom. Positive psychology and its principles are quite new in the field of language teaching (MacIntyre & Mercer 2014). The intervention to be carried out is the first positive education intervention in TESOL (teaching English as a second language) in Finland.

*Aim:* The aim of the study is to explore how positive pedagogy and the use of character strengths to foster learning work in an L2 classroom. It is assumed that these are all factors that play an important role in class participation and speaking of English, development of study skills, group atmosphere, cultural awareness and, finally, learning outcomes. The idea of strength-based teaching is to support and develop the traits and capacities needed to study an L2 successfully, enjoyably and meaningfully. The final aim of the study is to present new perspectives and practices to TESOL.

*Method:* A teaching program was designed and an intervention was carried out with experimental (N=183) and control groups (N=61) in classes where English is taught as an L2. The intervention was preceded by some piloting (autumn 2016) and followed by the training of some teachers and their experimentation with the methodology developed (autumn 2017). The study makes use of a mixed-method approach. Pre-and post tests were used to evaluate students' perseverance, participation in classroom activities, engagement in studying and achieving goals and the atmosphere in the classroom. In addition, semi-structured face-to-face interviews have been conducted with teachers. The pupils are Finnish elementary school 5<sup>th</sup>, 6<sup>th</sup> and 8<sup>th</sup> graders from the metropolitan area, and they include also special education students and immigrants.

*Results:* The preliminary results of interviews show that teachers experienced increased positive interaction in classroom, increased conscious use of strengths by pupils, increase of trust in teacher-pupil relationship and empowerment as a teacher.

*Conclusions:* The preliminary results encourage further experimenting on the teaching practices and expanding them to the benefit of study material producers.

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## Psychometric Properties of the Dutch Version of the Mental Health Continuum-Short Form Assessed in Adolescents

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**Keywords:** psychometric properties, positive mental health, well-being, adolescents

*Background:* In recent definitions, mental health is conceptualized not merely as the absence of mental illness, but also as the presence of positive feelings and positive functioning in individual and community life [1, 2]. Previously, in a Dutch speaking adult population sample, this so-called dual-continua model of mental health was confirmed [3]. To date no studies have investigated this two-continua structure of mental health in Dutch speaking adolescents, in part because a valid instrument to assess positive health in adolescence is currently not available.

*Aim:* The objective of the current study is to validate the Mental Health Continuum-Short form (MHC-SF), a self-report questionnaire for positive mental health assessment, in a sample of healthy adolescents aged between 12 and 18 years. Reliability, convergent validity, concurrent validity and divergent validity of the adapted MHC-SF (hereafter MHC-SF-A) are examined. It was expected that the MHC-SF-A is a reliable and valid instrument to assess positive mental health in adolescents, and that positive health and mental illness would represent two related but distinct continua.

*Method:* The original MHC-SF was first adapted for use in adolescents by two lifespan psychologists. Next, three 12 year old adolescents were asked to evaluate the adapted questionnaire, after which incomprehensible and difficult items were adjusted accordingly. Four hundred sixty-seven adolescents completed the MHC-SF-A, the WHO-5, measuring wellbeing, the FEEL-KJ, measuring emotion regulation strategies and the SDQ, measuring psychopathology, at baseline. In total, 283 adolescents (61%) completed the questionnaires at baseline and follow-up ( $M_{\text{age}} = 14.34$ ,  $SD_{\text{age}} = 1.97$ ; 61,9% girls) and were included in the data analyses. To test reliability, internal consistency was assessed using Cronbach's alpha coefficient. Correlation analyses were used to assess test-retest reliability, convergent validity, concurrent validity and divergent validity.

*Results:* The internal consistency of the MHC-SF-A was good (Cronbach's alpha = 0.88). Results revealed high test-retest reliability ( $r = 0.77$ ,  $p < 0.001$ ). Correlation analyses showed significant positive associations with the WHO-5 ( $r = 0.67$ ,  $p < 0.001$ ) and adaptive emotion regulation strategies of the FEEL-KJ ( $r = 0.43$ ,  $p < 0.001$ ). Significant negative correlations were found with maladaptive emotion regulation strategies of the FEEL-KJ ( $r = -0.37$ ,  $p < 0.001$ ) and the SDQ ( $r = -0.54$ ,  $p < 0.001$ ).

*Conclusions:* The results support the validity of the MHC-SF-A for use in Dutch speaking adolescent samples. It has been shown that also in adolescents positive mental health is an indicator of mental well-being and can be reliably assessed with the MHC-SF-A. The MHC-SF-A can be used to conduct further research on positive mental health in Dutch speaking adolescents.

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## Being Mindful to Become Resilient: A Prevention Focus

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**Keywords:** mindfulness, resilience, well-being, rumination, selfreflection

*Background:* Studies have shown that resilient persons are better in coping with life and work events. Despite adversity they experience self-control and find the strength to carry on. We are interested in how resilience can be influenced in terms of not getting discouraged. Being aware of one's thoughts and feelings meanwhile not becoming seized is referred to as mindfulness. Mindful persons do not judge, but rather observe and accept the situation at hand. More mindful persons will also be more resilient because mindfulness reduces stress symptoms and focuses on the here and now. Due to this focus of attention persons are better able to regain life and can better deal with setbacks.

*Aim:* In this study we examine under which circumstances dispositional mindfulness is associated with being in a state of resilience. More specifically, we test whether a state of well-being and reflection and rumination as emotion regulation strategies moderate the relationship between mindfulness and resilience.

*Method:* A representative sample of Dutch and Flemish employees (N = 388) filled out a questionnaire. We used Brown and Ryan's Mindful Attention Awareness Scale, Trapnell and Campbell's Reflection and Rumination scale and Christopher and Bernard's Brief Resilience Scale. We tested for moderation with hierarchical regression analysis.

*Results:* As predicted mindfulness was positively related to resilience ( $\beta = 0.220$ ;  $t = 3.424$ ;  $p = 0.001$ ). Furthermore, our findings indicate that rumination and well-being moderate the relationship between mindfulness and resilience ( $\beta = 0.089$ ;  $t = 2.229$ ;  $p = 0.026$  and  $\beta = -0.128$ ;  $t = -2.804$ ;  $p = 0.005$ ). Reflection, in contrast, did not show any relationship with resilience nor mindfulness ( $\beta = -0.082$ ;  $t = -1.734$ ;  $p = 0.084$  and  $\beta = -0.062$ ;  $t = -1.303$ ;  $p = .193$ ).

*Conclusions:* The results indicate that in case of low well-being mindfulness helps in developing resilience. Influence of dispositional mindfulness is high if persons ruminate much or experience a low level of well-being. The results may be useful in situations where one preventively wants to pay attention to resilience, for instance, coaching individuals in or selecting them for 'contact professions'.

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## The Serene Path from Wisdom to Authentic-Durable Happiness

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**Keywords:** wisdom, happiness, self-transcendence, serenity

**Background:** To date, few papers investigated the link between Wisdom and Happiness, with varying results [1]. We focus on the relationships between Self-Transcendent Wisdom (STW) [2] and the two components of Authentic-Durable Happiness (A-DH) [3], i.e., “Contentment” and “Inner Peace”. Dambrun found a mediation path whereby Self-Transcendence increases A-DH states by regulating affects [3].

**Aim:** Testing the hypothesis that A-DH results from an ability to tap into an “Inner Haven” which would allow one to remain serene in the face of event fluctuations.

**Method:** 1025 participants filled in an online survey including French versions of happiness (i.e., Subjective A-DH Scale [3]) and STW (i.e., Self-transcendence subscale of the new version of the Adult Self-Transcendence Inventory, ASTI [2]). They also filled five items of the “Inner Haven” subscale of the Brief Serenity Scale [4]. Two SEM models were used for bootstrapped mediation analyses (Figure 1).

**Results:** Fits were good for both Contentment (RMSEA=.046 [.042; .051]; CFI=.963; SRMR=.039) and Inner Peace models (RMSEA=.052 [.046; .058]; CFI=.960; SRMR=.041). Mediations effects were both significant. Surprisingly, after controlling for Inner Haven, the direct effects of Self-Transcendence were significantly *negative*.

**Conclusions:** The combination of a new version of the ASTI and an inner Haven mediation provided us new insights on the STW / A-DH relationships. We are currently investigating the origin of the negative direct effects. To our knowledge, this research provides the first evidence that Serenity mediates the positive relationship between Self-Transcendence and Authentic-Durable Happiness.



Figure 1. Mediated effects of Self-Transcendence on Contentment and Inner Peace.

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**Talent Support within a Positive Psychological Framework –  
The Hungarian Templeton Program***Szilvia Péter-Szarka*

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The Hungarian Templeton Program, lasting from 2015 March until the end of February 2017, was a pilot program that aimed to identify, nurture and support exceptional cognitive talents aged between 10 and 29 with the help of the Hungarian Talent Support Network. In the first half of the Program 315 exceptional Hungarian cognitive talents were identified by a complex, online assessment methodology, chosen out of nearly 20,000 applicants. In the second half of the Program each Junior Templeton Fellow got an individually tailored talent support program.

The program elements were set up within a positive psychological framework: focus on individual needs, networking, strength-based identification, building a community, enhancing autonomy and responsibility for own progress, complex mentoring system and encouragement of social responsibility. The presentation gives an overview and a first-hand experience of how positive psychological principles can be applied in the practice of talent support.

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## Psychophysiological Aspect in the Experience of Daily Stressors

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**Keywords:** daily stressors, expressiveness of stressors, psychophysiological characteristics, confirmatory factor analysis

*Background:* Most stress researchers conceptualize it from the perspective of the impact of major life events and associate them with physiological, psychological and behavioral manifestations [1]. Severe stress is considered as a consequence of everyday problems - daily hassles [2].

Aim was to study the correlation of the psychological and physiological characteristics of the experience of daily stressors, depending on the stability of the nervous reaction. We hypothesized there were characteristics that act as predictors, both to reduce the level of daily stressors, and to increase their intensity; and characteristics that act as a moderator.

*Methods:* "Scale of perceived stress-10" Russian version, List of daily stressors; Express diagnostics of person's functional state; scale "Locus of control"; scale "Psychological well-being" C. Ryff [3]; 4 factors from 16PF test (Cattell). Participants: 326 adults aged 20-68 were divided into five groups with different intensity of daily stress: low, below average, average, above average, high.

*Results:* Confirmatory factor analysis revealed the specific relationship between the experience of daily stressors, psychological and physiological characteristics. We revealed direct influence on the decrease of daily stress situations of such characteristics as environmental mastery, emotional stability and self-confidence. It was shown that internal control acts as a moderator, influencing the decrease in the severity of daily stressors through an increase in resistance (perceived scale "resistance to stress"). Stability of the nervous reaction contributes to an increase in internal control, as well as a decrease in the level of anxiety and tension. It was shown that the intensity of everyday stressors' experiences contributes to the increase of frustration and impulsivity.

*Conclusions:* Our study revealed the specifics of the relationship between psychological and physiological characteristics in the experience of daily stressors. An analysis of the severity of the experiences of daily stressors revealed there were qualitative and content aspects of the experience. The direct relationship between the factors of experiencing daily stressors and the parameters of the PSS-10 proved the intensity of the stressors' experience.

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## Defining Hope: Mapping Academic Perspectives Using Bibliometric and Concept Analysis

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**Keywords:** hope, bibliometric analysis, concept analysis, literature review, optimism

*Background:* Snyder's hope theory [1] has generated much psychological research, yielding valuable insights into the motivating and mobilizing capacity of hope. However, critics have stressed that this theory disregards the emotional, social and passive aspects of hope [2]. Moreover, some mismatch exists with lay-people's experiences [3], as well as with research in other scientific fields. Consequently, current studies may portray only a partial picture of reality, overlooking the aspects of hope not incorporated in Snyder's theory.

*Aim:* The aim of this study is 1) to give a trans-disciplinary overview of the most important theories on hope and 2) to develop a more comprehensive definition of hope, covering its' most important aspects.

*Method:* Firstly, citation networks of academic papers with the author keyword 'hope' are analysed using VOSviewer. Cluster analysis is performed to identify the most important studies within sub-fields. Secondly, content analysis is used to collect all definitions, descriptions and characterizing traits of hope, and cluster-analysis is performed to identify the domains of hope.

*Results:* The analyses are still ongoing, but some preliminary results can already be reported. For example, seven clusters in hope studies can be discerned: 1) Scale development and correlates 2) Psychological capital 3) Hope as a societal force 4) Hope and mental illness 5) Coping with non-terminal diseases 6) Coping with terminal diseases 7) Spirituality.

*Conclusions:* Although no conclusions can yet be drawn, preliminary results indicate that there is considerable diversity in definitions of hope which together will hopefully contribute to a more enriched, multi-disciplinary conceptualization of hope. This information can be used for the development of psychometric instruments and better understanding of the role of hope in context.

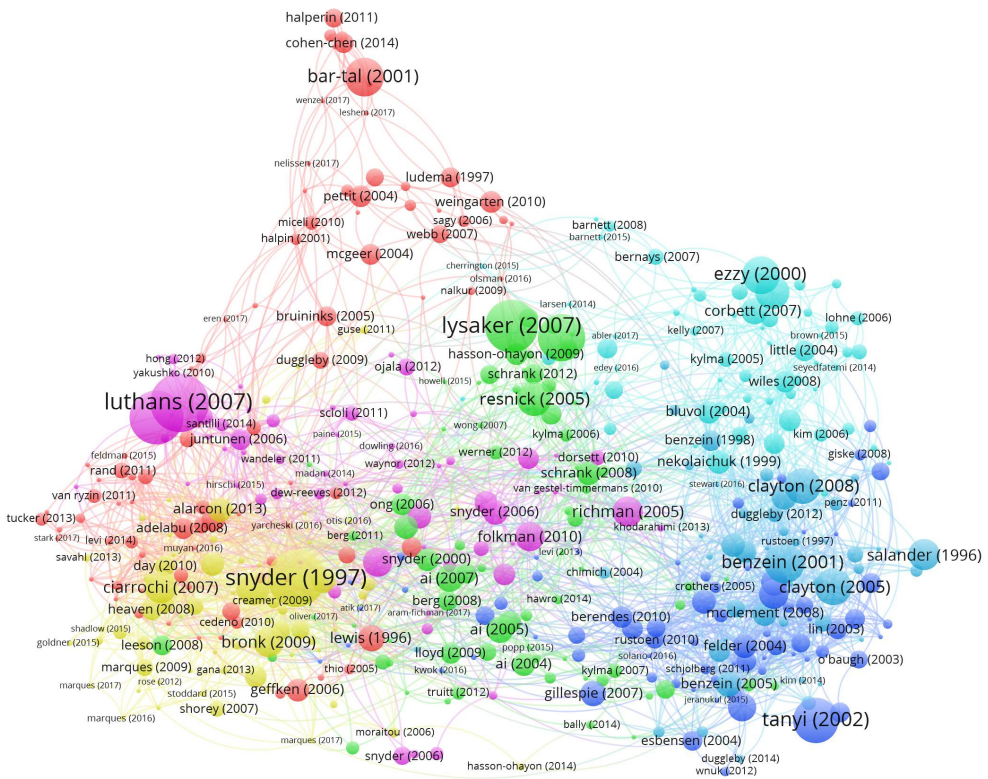


Figure 1. Network visualisation of studies on hope

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## Development and Validation of the Ethicotherapy Quality of Life Questionnaire

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**Keywords:** development, ethicotherapy, morality, psychometric properties, questionnaire, validation

*Background:* Ethicotherapy is a therapeutic-preventive approach that focuses on the relationship between physical and moral health. Dr. Bezděk scientifically substantiates the role of morality and religiosity played in human health. He defined morality as the purity of the soul, which is free from any human moral defects such as anger, hedonism, hatred, or lie that are assumed to cause or worsen different physical and mental diseases. Physical disease is seen as the embodiment of an internal conflict (a source of biological stress) experienced by the individual as a result of “unhealthy” attitudes to life, habits, ways of experiencing, thinking, and behaving which are not in accordance with the principles of love and unity [1-3]. No tool is currently available to assess quantitatively the preventive or therapeutic effect of Ethicotherapy or to identify the areas that need change in one's life.

*Aim:* to develop and validate a new instrument to identify the main areas in a client's life deserving attention within a prophylactic or therapeutic procedure and, at the same time, to monitor the therapeutic outcomes.

*Method:* A mixed-method study design was used to develop and validate the Ethicotherapy quality of life questionnaire (EQLQ). Items were generated by conducting focus groups and individual interviews supplemented with literature searches and expert opinions (Study I). The final questionnaire was developed by an exploratory factor analysis and verified by a confirmatory factor analysis in a sample of mostly healthy individuals (N=396) (Study II). The scale was further tested in a sample of chronically ill patients (N=91) (Study III).

*Results:* The EQLQ was developed. An exploratory factor analysis generated 30 items grouped into 8 domains. The EQLQ demonstrated good face validity, internal consistency, convergent validity and test-retest reliability. EQLQ showed an ability to distinguish between healthy subjects and subjects suffering from symptoms of psychopathology. One of the domains regarding attitudes towards conventional medicine showed a good sensitivity to change after a holistic non-Ethicotherapy intervention.

*Conclusions:* We have developed the EQLQ with good psychometric properties. Future research investigating a relationship between EQLQ, health and physical illness in different populations and cultural settings is recommended.



### **Acknowledgments**

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## Empathy, Styles of Humor and Social Competence in University Students

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**Keywords:** empathy, styles of humour, social competence

*Background:* Past research studies have highlighted that empathy and humor are associated with different facets of socialization.

*Aim:* This research examined the association between empathy and styles of humor with social competence.

*Method:* The sample comprised of 186 university students, men (n=93) and women (n=93), drawn through multi-stage sampling technique from three private universities of Lahore. It was hypothesized that social competence can be predicted by empathy and styles of humor. Correlational survey design was used in this research. Interpersonal Reactivity Index, Humor Styles Questionnaire and Interpersonal Competence Questionnaire were used to measure empathy, styles of humor and social competence, respectively

*Results:* The above proposed hypotheses were verified by carrying out hierarchical multiple regression. Empathic concern and self-enhancing style of humor turned out to be significant predictors of social competence. Results endorsed that men used more maladaptive styles of humor as compared to women. However, no significant differences were found in empathy and social competence between male and female university students.

*Conclusions:* Educational psychologists and counselors in universities can enhance social competence by promoting empathic attitudes and humor in university students.

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## Daily Practice of a "Well Being Routine": A New Approach to Positive Interventions at the work Place

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**Keywords:** positive interventions, work and organizations, well-being

*Background:* Despite impressive empirical support to the effectiveness of many positive psychology interventions in increasing well being, Most of these interventions offer a temporary, short term, specific attempt to increase well being, mostly by addressing one distinct aspect or element of well being (e.g., gratitude, optimism, etc). Thus, these interventions suggest a temporary "cure" or increase in well being rather than offer a sustainable ongoing routine aimed at increasing but also maintaining well being level. Similarly, work place interventions demonstrated the same approach by introducing a time framed positive intervention with short term both individual level and organizational level benefits; and a gradual decline when the intervention ends. This "Well Being Routine" advocates a constant, enduring effort and commitment to the cultivation of well being and seeks to incorporate as many principles and themes. It addresses several aspects of well being (emotional- psychological, social, physical), combines different approaches to well being (hedonic- eudemonic) and gathers multiple evidence based themes and techniques (e.g., gratitude, meditation, journaling, physical activity etc). It offers a constant frame or core as well as varying weekly themes.

*Aim:* Our aim was to implement a daily (or an almost daily) practice of this well being routine within the employees of a large health organization as well as to test the effectiveness of such practice on various both individual and organizational level outcomes.

*Method:* A daily well being routine practice was introduced to 50 employees in a large health organization. Employees were invited to voluntarily attend three 45 minute sessions. During these sessions employees practiced the 4 step routine (walking, stretching, writing, and meditating) and received a short explanation about the well being benefits associated with each stage. After three sessions employees were invited to participate in a weekly group practice as well as a daily individual practice. Base line measures of burnout, job satisfaction, subjective well being and positive and negative emotions were collected as well as organizational performance measures.

*Results:* short term (1 month) improvement in most measures was evident, while long term effects are still evaluated.

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## **Character Strengths and Well-Being on Children Aged from 7 to 10: An Exploratory Study**

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Positive psychology founded by Seligman and Csikszentmihalyi, (2000) is at the origin of the study of character strengths (Peterson and Seligman, 2004). From six virtues, they developed 24 character strengths. While the study of character strengths is quite advanced in adults, a "young" version has been elaborated for teenagers from 10 to 17 (VIA-Youth, Park and Peterson, 2006). Other studies have revealed significant links between the characters and well-being in children and adolescents (Van Eeden Cilliers and Van Deventer 2008). Recent research has shown that when people use their strengths, their learning curve and performance are improved at work (Clifton and Harter 2003). In other words, they learn faster and work better; they are also more motivated and have a higher level of satisfaction, sense of mastery and competence (Linley and Harrington 2006, Peterson and Seligman 2004). In a correlational study Wagner and Ruch (2015) show stronger correlations between positive classroom behaviors and character strengths such as perseverance, self-regulation, caution, social intelligence, and hope. They also showed an important relationship with academic achievement (Weber, Wagner, & Ruch, 2016).

On the other hand, Shoshani and Ilanit (2012) show a link between parents' character strengths and the way children develop school adaptation (Ngai, 2015).

It seemed interesting to investigate whether the acquisition of character strengths in the childhood could be favored by the family.

We selected a sample of 30 children aged 7 to 10 and offered them a workbook based on character strengths by the mean of a exercise booklet to complete with their parents. The hypothesis is that children should have a higher level of self-esteem, hope, and satisfaction at the end of the experience. Parents should also benefit from an increase of the three scores. The first pre-tests and results are very encouraging. The final results will be presented and discussed

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## Life Satisfaction and Reciprocity Based on Reputation: Testing the Mediating Role of Personal Religiousness

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*Background:* Reciprocity based on reputation consists in ‘third party altruism’ [1] and generally occurs in two kinds of situations. The first condition is when an individual who helps, acquires a good status among other people and attracts their aid in the future. The second situation happens when an individual who does not help, obtains a bad reputation and does not acquire assistance [2]. This regularity of behavior when kindness is rewarded and meanness is punished reminds the “Belief in a Just World” theory (BJW) which maintains that people get what they deserve: good things tend to happen to good people and bad things to bad people [3]. The empirical evidence supports the hypothesis that BJW may be associated with optimism, self-esteem, satisfaction with life, and happiness [4]. On the basis of this analogy, it can be expected that reciprocity based on reputation or downstream indirect reciprocity (DIR) may be connected to different aspects of subjective well-being.

*Aim:* The goal of this study was to test if life satisfaction (LS) correlates with DIR and if their relationship could be mediated by some other variables. We assumed that one of the potential mediators could be personal religiousness (PR) as PR correlates positively with LS and happiness [5]. Moreover, according to many moral systems being altruistic pays off [6].

*Method:* The research was conducted on the group of 98 adolescents who completed *Downstream Indirect Reciprocity Scale (DIRS-11)*, *Satisfaction With Life Scale*, *Personal Religiousness Scale* (Jaworski, 1998). The mean age of the respondents was  $M = 16.81$  with  $SD = .713$  (range = 15-18 years). Most were women (71%).

*Results:* The results illustrate a positive correlation between SL and PR ( $r = 0.671^{**}$ ), DIR ( $r = 0.483^{**}$ ). Additionally, investigation of the mediating role of PR in the relationship between SL and DIR revealed that SL was significantly reduced upon the inclusion of PR ( $\beta = 0.483 \rightarrow \beta = .259$ ;  $z = 2.416$ ;  $p < .05$ ). Therefore, testing mediation confirmed that PR acts as a mediator.

*Conclusions:* The obtained results seem to prove the existence of significant indirect effect of LS on DR through PR. This mediating role of personal religiousness link can be interpreted as a motivation for ethical action, a potential source of social norms and an individual’s judgment of right and wrong [7]. In fact, Furrow and collaborators [8] observe that religion is a resource in developing personal meaning and concern for others that can prompt prosocial behavior.

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## **Examining the Mindful Approach Towards Eating: Underlying Concept and its Measurement**

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Mindful eating is a construct that has been emerging from studies examining the impact of mindfulness on eating behavior. However, its conceptualization and operationalization requires further examination.

To contribute to the assessment of the robustness of the construct, this cross-sectional survey study evaluated the psychometric properties and construct validity of the Hungarian version of the Mindful Eating Questionnaire. Confirmatory factor analysis (CFA), exploratory factor analysis (EFA), correlational tests and between-group comparisons were applied on data gathered from a sample of Hungarian university students (N=323).

While the CFA showed a rather inadequate fit to the original model structure, the presence of the five factor structure was confirmed by the results of the EFA, with only minor deviations from the original model. The correlation coefficients between factors ranged from -.01 to .51, and a principal component analysis uncovered two components of the subscales. The correlations with body mass index, experience with regular meditation practices, impulsiveness, trait mindfulness and emotional and uncontrolled eating were calculated to understand the nomological network of mindful eating. Correlation matrix yielded mixed results concerning the construct validity of mindful eating as measured by the MEQ.

Although the original factor structure of the Mindful Eating Questionnaire was confirmed using the Hungarian data and it had appropriate psychometric properties, our results also show that there is no unequivocal cohesion between the scales of the questionnaire. This finding and the mixed results of the construct validation testing implies the need for further exploration of the concept of mindful eating.



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## Using Children's Literature to Facilitate Hope, Grit, and a Growth Mindset in Elementary School Students

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**Keywords:** hope, grit, mindset, education

*Background:* In the age of high stakes testing in the United States, educators are focusing on assessing younger students to address issues with academic achievement. Students who experience constant assessment may begin to doubt their academic capabilities and feel the stress of constant evaluation and inevitable failure. The researchers in this study were interested in investigating what would provide a potential buffer for students in high stakes testing environments. The buffers in this study were positive psychology constructs hope, grit, and mindset. Hope is a disposition based on theory that an individual must have the “will” and the “ways” to achieve valued goals [1]. Grit is a non-cognitive trait comprised of passion and perseverance to achieve a goal even when difficulties arise [2]. A positive mindset is needed in order for hope and grit to even be possible. There are two types of mindset, growth and fixed. Those with a fixed mindset are afraid of failure while growth mindset individuals acknowledge failure as a part of learning [3].

*Aim:* The aim of this study was to determine whether hope, grit, and mindset could be taught through children's literature to a group of elementary school students.

*Method:* This was a quasi-experimental design as the researchers were not able to randomly assign students to the conditions. One elementary classroom served as the control group ( $N = 19$ ) and a second classroom was the experimental group ( $N = 23$ ). All students took the hope, grit, and mindset scales at the beginning of the school year and then again after a 6-week time period. These served as a pre and post test measure of their knowledge and development on these constructs. The experimental group followed a curriculum designed to teach positive psychology through pre-selected children's books that conveyed messages about experiences with failure, perfectionism, and perseverance when challenges became present. Other books were included during this timeframe to cover happiness and character strengths, however, they were not the focus of the study. The curriculum included questions, tasks, and other activities the teacher engaged the students in. The control group did not read or learn about positive psychology within their classroom.

*Results:* The control group remained relatively unchanged from the pre-tests to the post-tests across all positive psychology constructs. The group exposed to the positive psychology constructs through the children's literature showed a significant increase in scores of hope, grit, and growth mindset. This finding suggests that the young students were able to conceptualize the positive psychology constructs through the stories they read.

*Conclusions:* The results of this study showed that the implementation of children's literature as a means to convey positive psychology constructs like hope, grit, and mindset is an effective learning tool. The stories may help make the constructs more relatable or concrete

for younger students as they read about the characters. There are some limitations to consider. For example, the students were not randomly assigned to the treatment or control group. The researchers were only allowed access to classrooms based on teachers who chose to participate in the study. Some teachers chose not to participate and may be different in their own levels of hope, grit, and mindset. This research holds promise for many school districts who would like to find ways to change the mindset of their students to promote hopeful and gritty dispositions. Many educators struggle with the best ways to convey positive psychology messages to their students, children's literature offers a promising start to engaging young learners in this discussion.

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## Applications of Positive Psychology to Overweight and Obesity: A Novel Approach Incorporating Molecular Genetics

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**Keywords:** positive psychology, obesity, weight loss, well-being, molecular genetics

*Background:* Obesity represents a world-wide health problem with substantial social, medical, and economic consequences [1, 2, 3], and there is inconsistent evidence for long-lasting effects of any of the currently applied treatments [4]. Positive psychology (PP) has been successfully applied to psychological disorders and disturbances *related* to obesity [5, 6, 7, 8, 9].

Research shows that differences in human development depend on the interaction between environmental exposures and individual genotypes and phenotypes [10]. PP stimuli have been shown to produce changes on a molecular genetics level with responsiveness to the stimuli depending on individual genotypes [11]. The current study presents a novel approach to weight management, where a Positive Psychological Intervention (PPI) is tested as an external stimuli and a potential trigger of change in obesity-related gene expression.

*Aims:* The aim of this research was to develop a PPI for individuals with weight problems and assess its effectiveness on well-being and weight loss in non-clinical populations. Further aims were to identify the potential molecular genetic pathways through which the PPI functions, and validate the intervention through molecular genetic approaches using the OXT gene expression as a model system.

*Method:* As part of the first author's PhD research, a 6-week PPI was designed and delivered in two pilot studies to 38 participants with weight problems. It was a combination of experiential group work and online learning where each week was devoted to one PP theme. It was expected that by focusing on the positive aspects in life and engaging in intentional activities that promote flourishing, the intervention would result in improved well-being and decrease in depressive symptoms. Furthermore, it was expected that weight loss may occur as a by-product in response to the PPI, particularly in those participants who would carry genetic polymorphisms causing increased responsiveness to a PP stimuli.

*Results:* As predicted, quantitative analyses revealed significant increases in well-being and body-image flexibility, and decreases in depression and anxiety. In addition, 12 participants lost significant amounts of weight after receiving the PPI. Preliminary results from the molecular genetic approaches using real time RT-PCR revealed significant increases in the OXT gene expression levels in response to the intervention suggesting that the PPI may be able to manipulate expression of some genes related to obesity leading to weight loss. The PPI will be further tested in a full randomised controlled trial.

*Conclusions:* The current study's findings suggest that the PPI can make an effective contribution to mental health and overall well-being of individuals with weight problems. Furthermore, it seems likely that the PPI affected weight loss through unknown molecular genetic pathways, and thus, may present important implications for future weight loss treatment approaches.

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## A Positive Narrative Intervention for Promoting Eudaimonic Well-being in Schools: a Controlled Investigation

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**Keywords:** eudaimonic well-being, children, narrative strategies, school, anxiety

*Background:* Positive Psychology research proclaimed the importance of incorporating education programs for promoting well-being in schools. However, eudaimonic well-being received only limited attention and only few interventions aimed at its promotion in children [1-3].

*Aim:* This research aimed to compare the efficacy of an intervention based on narrative techniques (Positive Narrative Intervention) vs a controlled condition.

*Method:* School interventions were performed in 165 students (78 F, 87 M; mean age= 9.3 years; SD= 0.5).

*Results:* At post test, children assigned to the narrative intervention reported increased levels of well-being and decreased depression, anxiety and somatization, compared to controls. These improvements were maintained at 3-month follow-up.

*Conclusions:* This Positive Narrative Intervention consisted of only 4 sessions, but it was able to yield many benefits in well-being and in distress. The use of narrative strategies helped children to identify their personal resources and to assimilate the concept of eudaimonic well-being that could be difficult to process because of its abstractness and multidimensional nature.

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## Attitudes and Subjective Life Expectancy: An Introduction of a New Measurement

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**Keywords:** subjective life expectancy, optimism, spatial based measure, positive attitudes, embodied cognition

*Background:* Life expectancy (LE) increased in the last fifteen years by 3.5 years in Europe and by 5 years in average in the world [1]. Socioeconomic and health factors (e.g., children mortality, access to medical care) can account for the main differences in LE among countries [2]. There are, though, other factors that may contribute to the increase of LE, such as dispositional optimism [3]. Subjective life expectancy (SLE) is one important factor that has been found to predict LE [4].

*Aim:* Literature suggests that SLE may be influenced by psychological interventions [5]. In the present study we investigated whether an intervention aimed to induce a more positive appraisal of daily life may have an influence on subjective life expectancy.

*Method:* 50 participants were randomly assigned either to a positive attitude group, where they had to choose, once a day for a week, the three more accurate sentences to describe their day, among a set of 22 positive sentences, or to a neutral attitude group, where they had to perform the same task, in this case choosing among 22 neutral sentences. We employed a traditional SLE measure (i.e., self-estimated probability of being 60, 70, 80, or 90 years old) as well as a spatial based measure of expected lifetime (i.e., participants had to situate themselves on a 10 meter long line representing their lifetime). Additionally, dispositional optimism was measured by the Life Orientation Test.

*Results:* Both the traditional and the spatial based measure were found to correlate with dispositional optimism suggesting convergent validity. An ANOVA on spatial based SLE measure showed a significant interaction between group and measurement time, indicating an increase (decrease) in SLE after the positive (neutral) intervention.

*Conclusions:* In the present study we introduced a new measure of SLE. This spatial based measure was found to be sensitive to an intervention aimed to induce a more positive appraisal of daily life. According to these results, SLE could be sensitive to rather short psychological interventions, especially when its measure involves less cognitive processing.

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## Personality Traits and Perception of Motives of Behaviour in Humorous Situations

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**Keywords:** humour styles, person perception, communication, personality, motivation

*Background:* Humour researchers distinguish four types of humour. They refer to a distinction used by researchers of interpersonal behaviour [1],[2] between action orientation, individualism, autonomy, self orientation and other orientation, taking care of relationships and the need for affiliation. An alternative approach is proposed by Costa and McCrea [3], who assume that two traits from the Big Five model: Extraversion and Agreeableness are particularly related to the Circumplex dimensions. Neuroticism, Openness to experience, and Conscientiousness are among other factors that refer to interpersonal relationships, and also comprise other spheres of human functioning. According to them, the Big Five model, in addition to interpersonal dispositions, also covers the emotional-motivational predispositions. Numerous studies indicate the existence of relations between humour styles and personality traits [4],[5].

Humour styles are reflected in interpersonal behaviour, including during the communication process. Motivation is an important element of communication competence [6].

*Aim:* The study aims to answer a question whether there is a relationship between personality traits and perception of motives of behaviour in humorous situations.

*Method:* The study uses the Polish adaptation of NEO-FFI. In addition, four dialogues present four humour styles. After each dialogue, subjects were asked to assess motives using the semantic differential scales. The semantic differential was composed of eight opposite meaning terms. Each style was represented by two pairs of adjectives.

*Results:* The study shows that in case of persons who display neurotic traits, there is a relationship with the perception of aggression and humiliation in the dialogues. Such emotions are noticed regardless of the style of humour used in the dialogues. There is a relationship between Extroversion and Agreeableness and the perception of kindness and friendship, but also aggression and self-confidence in situations using the "I" statements and aggressive style.

*Conclusions:* The results of the studies show that personality traits differentiate human behaviour, which is associated with the perception of motives of behaviour of other persons. The use of humour, even affiliative humour, can be seen as oriented to humiliating and dominating other participants of a communication act. On the other hand, such personality traits as Extroversion and Agreeableness are conducive to positive assessment of humour used in the communication process.



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## **Examine the Relationship between Happiness, Meaning in Life and Hope with Mental Health among Nurses in Hospitals of Bandar Abbas**

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**Keywords:** happiness, meaning in life, hope, mental health, nurses in hospitals of Bandar Abbas

The aim of this study was to investigate the relationship between Happiness, Meaning in Life and Hope with Mental Health among Nurses in Hospitals of Bandar Abbas. The study sample was 140 nurses that selected via random stratified sampling method. Data gathered by Happiness, Meaning in Life, Hope and Mental Health questionnaires. The results showed there is a significant relationship between Happiness, Meaning in Life and Hope with Mental Health. Also, according the results  $R$  is 0.57,  $R^2$ , 0.33 and adjusted  $R^2$  0.31. In the other words, the study model explained about 33 percentage of criterion variable variance. Beta coefficients of Meaning in Life, Happiness and hope were 0.45, 0.23 and 0.20 respectively. Totally, the results confirmed the role of positive psychology constructs in predicting mental health.

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## Confirmatory Factor Analysis of Value in Action Inventory of Strengths (VIA-IS) Reduced Set for 5 Arab Countries

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**Keywords:** character of strengths, VIA-SI reduced set, 5 Arab countries, factor structure

*Background:* The Values in Action Inventory of Strengths VIA-IS (Peterson & Seligman, 2006; Ruch et al., 2010) is a self-report questionnaire that measures 24 widely valued strengths of character. A very large sample completed the VIA-IS with all 240 character strengths items and a reduced set of 107 unidimensional character strength items. We used this reduced version that was developed by Ng, Cao, Marsh, Tay, and Seligman (2017) in the current research.

*Aim:* In Arab countries, the VIA-IS reduced set has not been validated yet. For that, the specific objectives of the present study are threefold: i) to test the internal reliability and the structure validity of the Arabic version in some Arab countries and ii) to test the effect of sex on the factors and subscales of the VIA-IS reduced set.

*Method:* The Arabic translation, using “forward and backward” translation by four bilingual professionals, was conducted and Arabic versions equivalent to the original scale were created. Translators were not affiliated with the study to ensure comparability and meaning equivalence (Vallerand & Hess, 2000). The standard Arabic language was used in the translation. An independent professional revised the created versions to create an experimental Arabic version equivalent to the original scale. In general, several minor differences were corrected at this stage by agreement between the different translations. The final version was revised to ensure that the language used would be understandable by the participants from the four countries.

*Participants and procedures.* In the present study, participants were 3119 ( $M= 20.94$ ;  $SD= 2.09$ ) from 5 countries (KSA, 830; Iraq, 800; Sudan, 769, Morocco, 443; Oman, 277). They were 31.93% men and 68.07% women. Participants were asked to rate each item based on

a 5-point Likert scale, with response options ranging from 1 ('Very Much Unlike Me') to 5 ('Very Much Like Me').

*Measure.* The Values in Action Inventory of Strengths (VIA-IS) scale reduced by Ng. and his colleagues (2017) was used to provide an integrative measure of character strengths. The VIA-IS consists of 107 items for measuring 6 virtues and 24 character strengths. The 6 virtues are wisdom and knowledge, courage, humanity, justice, temperance and transcendence.

*Results:* Using the *Mplus 7.3* software, results confirmed the 5 factors model. CFA showed satisfactory fit to the data in terms of  $\chi^2$ , df ratio, GFI, NNFI and RMSEA. The  $\chi^2$  (2.1117,  $N= 3961$ ),  $p = 0.00$ , Non Normed Fit Index (NNFI) = 0.98, Comparative Fit Index (CFI) = 0.97, Root-Mean-Square Error of Approximation (RMSEA) = .04 [.03; .05], Goodness-of-Fit Index (GFI) = 0.97, Adjusted Goodness-of-Fit Index (GFI) = 0.96. The Goodness of Fit was acceptable in terms of  $\chi^2/df$  ratio, GFI, NNFI, RMR, and RMSEA. The results indicated that the 24 subscales had satisfactory reliability (mean  $\alpha = .81$ , mean corrected item-total correlations = .40). Results of the present study are quite similar with the African and Asian results (Khumalo, Wissing, & Temane, 2008; Littman-Ovadia & Lavy, 2012). In addition, sex has an effect on both of the 5 factors at  $p < .05$  or at  $p < .01$ .

*Conclusions:* We concluded that the Arabic version of VIA-IS reduced set had an acceptable reliability and factor structure. Sex has an effect on both factors and subscales.

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## Mindfulness in Mexican Young Adults: A Focus Group Study

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**Keywords:** mindfulness, awareness, openness to experience, self-knowledge

*Background:* Mindfulness has been described as a kind of nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is. In a state of mindfulness, thoughts and feelings are observed as events in the mind, without identifying with them or reacting to them in an automatic way [1]. This is to be contrasted with divert attention in memories, fantasies or plans, or behave automatically without being aware of one's own actions [2].

*Aim:* The aim of this research was to analyze how young adults without meditation experience perceive Mindfulness after a first meditation session.

*Method:* Participants were 28 young adults (54% women and 46% men) from 18 to 35 years old ( $M = 24.82$   $SD = 3.07$ ), residents of Mexico City. The sample was divided into four groups considering age and sex: 1) men from 18 to 24 years old, 2) women from 18 to 24 years old, 3) men from 25 to 35 years old and 4) women from 25 to 35 years old. Focus Groups technique was used [3] and the way of working was the same for each four groups: first, the Mindfulness expert led a brief meditation session for 30 minutes, afterwards; the moderator worked with each focus group for approximately one hour using a guide of six open questions. Information gathered during the focus groups was subjected to a thematic content analysis [4] using the Microsoft Excel 2010 program to account for the frequencies and obtain the categories. The results of qualitative study were compared with theoretical aspects of Mindfulness.

*Results:* When comparing the categories resulting from the analysis of each group, two important aspects need to be emphasized: a) in all the groups, the same four categories were presented: two theoretical categories that are included in the different models of Mindfulness (awareness and openness to experience) and two emergent categories that are not specified in the theoretical models of the construct (self-knowledge and relaxation); b) the predominant category in all the groups was awareness. Furthermore, for each theoretical category, sub-categories were identified in order to recognize useful language indicators to elaborate items for a Mindfulness scale for young Mexican adults.

*Conclusions:* The perception of mindfulness by young adults without meditation experience is quite consistent with theoretical approaches of mindfulness: young adults without meditation experience perceived that mindfulness includes a present-centered awareness in which thoughts, feelings, and sensations are accepted as they are and there's no need to avoid, escape, or change them. Young adults also perceive that in a state of mindfulness, it's necessary to stop diverting attention in memories, fantasies or plans.

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## Perceived and Measured Physical Activity, Physical Fitness, Health, and Occupational Readiness in Structural Firefighters

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**Keywords:** firefighters, fitness, perceived wellness, exercise behavior, fitness assessment

*Background:* Adequate physical fitness may decrease the risk of cardiovascular disease, on-duty injury or stress, and illness-related absenteeism, as well as promote greater job-efficiency in firefighters [1]. The willingness to improve physical fitness may be influenced by perceived need to do so based on information provided through fitness assessments [2]. Published data on these relationships in firefighters is scarce.

*Aim:* The aim of the study was to examine the association between perceived health and fitness with measured physical fitness and exercise behaviors in firefighters

*Method:* Assessments of aerobic fitness (AF), muscular strength (MS) and endurance (ME), body composition (BC), and flexibility (FL) were completed by 107 male firefighters. Firefighters ranked perceived physical fitness and exercise behaviors (PPFEB), weight and body fat (PWBF), and overall health (POH) from 1 (excellent) to 5 (poor). Self-reported frequency of aerobic activity (FAA), strengthening (FSE), and stretching exercises (FSTE) were also documented.

*Results:* PPFEB, PWBF, and POH showed significant inverse correlations with FL ( $p < 0.05$ ). PWBF and POH were significantly correlated with BC, but only POH and PWBF were significantly with ME and AF, respectively ( $p < 0.05$ ). Kruskal-Wallis analyses showed significant differences across levels of PPFEB for FL only ( $p < 0.01$ ). Significant differences across levels of PWBF were observed for BC and FL ( $p < 0.03$ ). Significant differences across levels of POH were observed for BC only ( $p < 0.00$ ). PPFEB, PWBF, and POH showed significant inverse correlations to FAA, FSE, and FSTE ( $p < 0.05$ ). ME and FL were significantly correlated with FSE and FSTE. Analyses revealed significant associations across levels of PPFEB and POH regarding FAA and FSE, but FSE was only significantly associated with PPFEB ( $p < 0.00$ ).

*Conclusions:* The lack of association between FSE and PWBF or POH and FSTE suggests more education on the benefits of strength training and stretching for improved BC and overall health is needed in this population. Regular physical fitness assessments may help strengthen the association between measured physical fitness, physical activity, and PPFEB, PWBF, and POH in firefighters.

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## Current Status of Subjective Happiness across Ages in Japan

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**Keywords:** subjective happiness, age, gender, marital status, Japan

*Background:* Pursuit of happiness is one of the most important themes of positive psychology. In Japan, it has been suggested that the elders are less happy than those of other age groups [1], while happiness has been shown to increase with age in the US and some other countries.

*Aim:* The present study is to investigate the current subjective happiness across ages among Japanese adults. The effects of demographic variables such as gender and marital status are also examined.

*Method:* An Internet survey concerning “happiness and life” was conducted by Cross Marketing Co., Japan. Participants were 2000 adults (mean age = 49.8; SD = 17.01). Questionnaire consisted of several scales, including Subjective Happiness Scale (SHS) [2] and Self-Compassion Scale [3]. The IRB of the first author’s institution approved the study.

*Results:* Means and SDs of SHS by gender and age are presented in Table 1. As shown, females were significantly happier than males in most age groups ( $F(1, 1988) = 26.10, p < .0001$ ). Moreover, the mean SHS score significantly increased with age among those above the 50s ( $F(5, 1988) = 43.16, p < .0001$ ). Their interaction was also significant ( $F(5, 1988) = 2.26, p < .05$ ). In addition, the married people showed significantly greater happiness than those without partners ( $F(1, 1798) = 199.67, p < .0001$ ).

*Conclusions:* In contrast to the previous national survey conducted 10 years ago [1], the present cross-sectional survey clearly reveals that subjective happiness increases with age in Japan. The difference might be due to the change of economic conditions in Japan that have become better in the past decade.

**Table 1.** Means and SDs of Subjective Happiness Score (SHS) by gender and age groups.

	20s	30s	40s	50s	60s	70s and over
Males	3.92 (1.09)	3.91 (1.09)	4.11 (1.17)	4.26 (1.03)	4.79 (1.10)	4.84 (1.03)
Females	4.38 (1.08)	4.34 (1.18)	4.10 (1.30)	4.48 (1.14)	4.91 (0.99)	5.14 (1.01)

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## A Latent Profile Analysis of Living a Calling, Burnout, Exploitation, Work-Life Balance, and Work-to-Leisure Conflict among Working Adults in South Korea

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**Keywords:** living a calling, burnout, exploitation, work-life balance, work to leisure conflict

*Background:* Living a calling (LC) refers to the extent to which an individual feels that she or he is currently engaging in work perceived as her or his calling [1]. To date, the bulk of research has focused highly on the positive side of LC, linking it to a host of positive work and well-being outcomes such as work meaning, career commitment, job satisfaction [2], and life satisfaction [3]. Yet a few qualitative studies have suggested potential negative aspects of LC such as burnout, work-life imbalance, the risk of exploitation, or overinvestment in work [4,5,6], known as “the dark side of a calling.” In an attempt to test the dark side hypothesis, a recent study [7] reported that LC was not significantly linked to greater burnout, workaholism, and organization exploitation. However, this variable-centered perspective ignores the possibility that there are differing subpopulations of working adults who show differential relations between LC and its potential dark side.

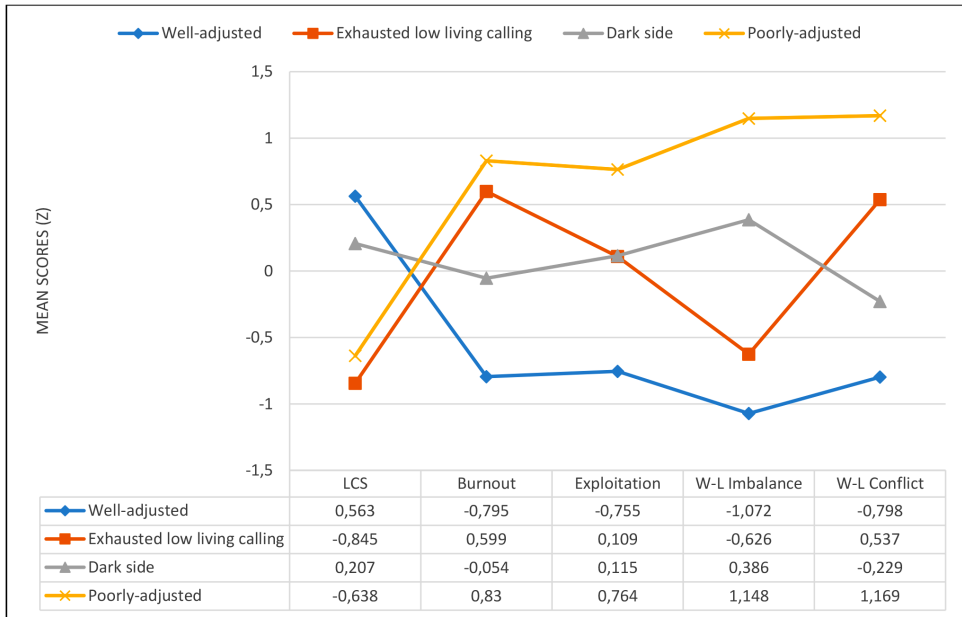
*Aim:* First, this study sought to determine if there are distinct subgroups defined by individuals’ scores on LC and the four variables that have been commonly suggested as constituting a possible dark side of LC (i.e., burnout, exploitation, work-life imbalance, and work-to-leisure conflicts) using a latent profile analysis (LPA). Second, this study examined mean differences across class membership in the levels of social support, adequate compensation, and work volition as well as a set of work-related (i.e., work meaning, career commitment, job satisfaction, withdrawal intentions, work-related physical and affective symptoms) and psychological well-being variables (i.e., life meaning, life satisfaction).

*Method:* Data were collected through an online survey service from 237 working adults in South Korea (51.5% male,  $M_{\text{age}} = 36.54$ , 57.8% administrative workers, 46% married with dependents). A selection of work and well-being measures was administered [3, 8-19].

*Results:* The LPA identified four classes of individuals representing different patterns of LC and their experiences in burnout, exploitation, work-life imbalance, and work-to-leisure conflicts. The four classes are High LC with low dark side (“Well-adjusted”), Low LC with high burnout and work-to-leisure conflicts (“Exhausted low LC”), Moderate LC with moderate dark side (“Dark side”), and Low LC with high dark side (“Poorly adjusted”). Results from ANOVAs indicated that, compared to the Well-adjusted group, the Dark side group scored significantly lower in career commitment and job satisfaction but higher in withdrawal intentions and work-related physical symptoms.

*Conclusions:* From a person-centered perspective, some individuals reporting moderate to high levels of LC appear to experience at least moderate levels of dark side and also demonstrated poorer work-related well-being than their counterparts with low dark side. The current work provides a better understanding of the complexity of LC and its potential dark side.

**Illustrations**



**Figure 1.** Latent Profiles of the 4-class solution. LCS= living a calling, W-L Imbalance = work-life imbalance, W-L Conflict = Work-to-leisure conflict.

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## Religiosity and Well-being among Russian Buddhists and Muslims

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**Keywords:** psychological well-being, religiosity, religious practice, Buddhists, Muslims

Previous studies of the relationship between psychological well-being and religiosity do not give an unambiguous result: most indicate a positive relationship [1], while the other suggests the religious are not happier than the nonreligious [5]. The majority of such studies based on Christian samples, a few papers devoted to psychological well-being of Middle Eastern [4] and European [2] Muslims. The studies of the Buddhists mainly related to evaluation of the positive effects of meditative practice [3] without paying attention to other aspects of Buddhist practices.

In Russia, along with Orthodox Christianity, Islam and Buddhism are the traditional religions, which are professed by a considerable part of population. This study aims to consider a wide range of Buddhist and Muslim religious practices in their interaction with various aspects of psychological well-being.

We explore religiosity through frequency of religious practices: (1) prayers or reading mantras, (2) reading sacred texts, (3) visiting mosque, Buddhist temple (datsan) or religious community meetings, (4) attending religious holidays and fasting, (5) meditative practice (for Buddhists only). To measure psychological well-being Russian versions of questionnaires were used: Personal Wellbeing Index, Mental Health Continuum - Short Form, Basic Psychological Need Satisfaction Scale, Satisfaction With Life Scale.

The sample included 500 believers of two religious denominations. In the group of Buddhists, half of the respondents live in Republic of Kalmykia, half in other regions of Russia (including the Moscow region) and the majority are Kalmyks and Russians. In the Muslim group all respondents are ethnic Tatars, most live in Republic of Tatarstan (capital Kazan and the small town Buinsk), the rest from other regions of Russia.

The results showed religiosity is significantly associated with most of well-being scales. Regularly or frequently practicing believers shows a higher level of well-being, compare with rarely practicing. Unique contribution to well-being variables of each practice is depending on religious denominations. The Muslim group religious practices largely folded into a single factor and act holistically. In the group of Buddhists, the effect of practices is differing for well-being aspects, while the leading ones are meditative practices. Social well-being, PWI index and Satisfaction with life is greater for Muslims (at  $p < .01$ ). Satisfaction of the autonomy basic psychological need is higher for Buddhists (at  $p < .001$ ). We discuss these results in accordance with the characteristics of Buddhist and Muslim practices in Russia.

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## Empowering Leadership, Psychological Empowerment, and Employee Work Performance: A Meta-Analysis at the Individual- and Team-Levels

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**Keywords:** empowering leadership, psychological empowerment, meta-analysis, well-being, and performance

*Background:* Empowering leadership refers to a supervisory style that involves the sharing of power and responsibility within hierarchical relationships in work settings [1]. Empowering leader behaviors are theorized yield increased employee perceptions of self-efficacy and control, and thus increased cognitive functioning and work performance.

*Aim:* Despite the concept of empowering leadership generating substantial research interest in the organizational behavior and management literatures, it has received less attention within the field of positive psychology. This is surprising, since empowering leadership is theorized to foster more autonomous and volitional types of work motivation, and thus employee well-being and performance. Thus, the aim of the present study was to meta-analytically review the empowering leadership literature to assess the expectable strength of the associations between empowering leadership and positive psychological processes at both the individual and team-levels in work organizations. This included determining its true-score associations with perceptions of employee psychological empowerment, volitional work behavior, and work performance.

*Method:* A systematic search of five electronic databases as well as prospective citation searches of available empowering leadership questionnaires yielded 2578 hits. This was reduced to  $k = 116$  studies based on the eligibility criteria, which were: adult participants examined within their organizational setting, and the study included a correlation between empowering leadership and at least one variable of interest. We used the psychometric meta-analytic method of Schmidt and Hunter [2] in conducting the analyses, correcting for sampling and measurement error in both the predictor and criterion.

*Results:* Results showed that empowering leadership was strongly positively related to both individual ( $k = 36$ ,  $N_{individual} = 10,331$ ,  $\rho = .514$  [CI = .48, .22]) and team-level ( $k = 8$ ,  $N_{team} = 548$ ,  $\rho = .48$  [CI = .38, .57]) psychological empowerment, and was moderately related with both individual ( $k = 19$ ,  $N_{individual} = 5,285$ ,  $\rho = .26$  [CI = .18, .33]).and team-level ( $k = 25$ ,  $N_{team} = 2,599$ ,  $\rho = .23$  [CI = .15, .31]) work performance. It was also strongly positively related to proactive and prosocial work behavior at both individual and team-levels, as well as employee well-being. In addition, a meta-analytic path-analysis further supported positive psychological processes that underpin empowering leadership approaches and their effects on employees in work settings.

*Conclusions:* Our results underscore the importance of supervisory styles that support the autonomy and professional development of employees, potentially enabling enhanced work performance and well-being.

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## The Mediating Effect of Perceived Hope on the Relationship between Dispositional Hope and Mental Health

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**Keywords:** dispositional hope, perceived hope, mental health, depression, anxiety

*Background:* The connection between hope and mental health has drawn the attention of numerous researchers. Several studies already proved dispositional hope to have a favourable effect on mental health.

*Aim:* The purpose of this study was not only to test the relationships between hope and health, but also to examine which of the two concepts of hope better predict mental health operationalized by level of depression and anxiety. The another aim was to examine the mediating effects of perceived hope on the relationship between dispositional hope and health.

*Method:* The study is a sub-study of the Czech part of the international project Hope Barometer. Data were collected anonymously through non-random convenience sampling. We used online questionnaires to measure perceived hope [1], dispositional hope [2], and depression/anxiety [3]. Research sample consisted of 741 Czech respondents aged between 18 to 80 years, 564 (76.1 %) female and 177 (23.9 %) male. Simple group comparisons, correlation analyses and regression analyses were performed using IBM SPSS Statistics 24 software. Mediation model was created by Hayes Process macro for SPSS.

*Results:* Regression analysis confirmed perceived hope and dispositional hope being independent negative predictors of mental health. Perceived hope ( $\beta = -.448, p < 0.001$ ) showed stronger negative correlation to mental health than dispositional hope ( $\beta = -.163, p < 0.001$ ). The model was statistically significant [ $F(3;738) = 172.16; p < 0.001$ ] and explained 31.8% of variance of mental health ( $R = 0.564; R^2 = 0.318; R^2 \text{ adjusted} = 0.316$ ). Mediation analyses confirmed a direct effect of dispositional hope on mental health ( $b = -.132, p < 0.001$ ), and showed that its indirect effect through perceived hope was stronger ( $b = -.227; 95\% \text{ CI} [-0.286; -0.181]; p < 0.001$ ).

*Conclusions:* The above findings support the legitimacy of the distinction drawn between the concepts of perceived hope and dispositional hope [1] which can separately serve as buffers against mental health problems.

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## **Meditation as a Trigger and an Enhancement to Flow: Cultivating Flow in Daily Experience**

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**Keywords:** flow, meditation, mindfulness

*Background:* The theory of flow is one of many perspectives on wellbeing [2]. The mental state of flow is a complex psychic event that mobilizes cognitive skills toward optimal performance [1]. Major aspects of the flow state are focus and self-awareness and can be accomplished through mindfulness.

*Aim:* This poster presentation explores the concept of flow, elements of its cycle, its triggers and predictors, as well as the common barriers to flow [1], and how they can be addressed through support mechanism of mindfulness and meditation, particularly Vipassana and Loving-Kindness Meditation (LKM) [3]. The goal of the presentation is to introduce the flow state as more attainable through applications of mindfulness, and to expand the possibilities for applying flow to everyday life.

*Method:* Meta-analysis of relevant research literature on the neurobiology of the Flow Cycle [4], the Buddhist Psychological Model (BPM) [3], and the analysis of the parallels between the two, were used to create the diagram of parallels. Several forms of meditation were introduced as flow triggers and an enhancement of four stages of the flow cycle. The Vipassana meditation was applied during the struggle phase, as insight meditation was shown to limit mental proliferation. In the release phase, the LKM, was shown to prevent the formation of mental states that have their origins in aversion. Concentration practices, employed throughout the flow phase, were shown to help regulate attention and limit sensitivity to distractions. In the recovery phase, the introduction of the ethical practices of Buddhism was shown to limit the mental proliferation caused by guilt, doubt or worry, thereby enabling an easier entry into the state of flow [3].

*Results:* Through the perspective of the BPM, mindfulness and insight meditation were shown to disrupt the cycle of rumination, while focused meditation was shown to prime our brain functioning to limit external distractions.

*Conclusions:* Being in the state of flow could be described as a form of mindful doing, because our actions and our consciousness merge. The flow experience, when achieved through mindfulness, can be made more attainable.

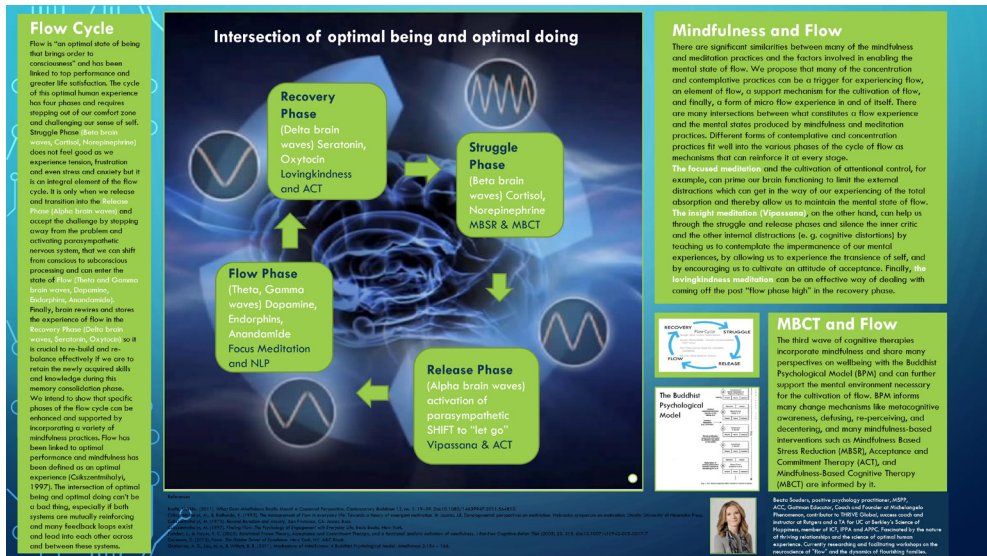


Figure 1.

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## **Psychological Resilience and University Students' Life Satisfaction – A Multiple Mediation Model**

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Despite the growing research on university students' life satisfaction, a few studies focused on the relationship between psychological resilience and cognitive component of the subjective well-being. The aim of this study was to assess direct and indirect effects of psychological resilience on global life satisfaction when multiple mediators were of interest simultaneously: presence meaning in life, perceived social support, and perceived stress. The sample consisted of 804 university students (495 female, 309 male,  $M=20.23$ ;  $SD=1.04$ ). The first hypothesis assumed that psychological resilience is positively related to presence of meaning in life, perceived social support, life satisfaction, and negatively to perceived stress. The second hypothesis presumed the direct effect of exogenous variable psychological resilience on life satisfaction, and indirect effects of endogenous variables: meaning in life, perceived social support, and perceived stress. The self-report scales (*The 14-Item Resilience Scale*, Wagnild, 2009, *The Satisfaction With Life Scale*, Diener et al., 1985, *Meaning in Life Questionnaire*, Steger, 2006, *The Multidimensional Scale of Perceived Social Support*, Zimet et al, 1988, *The Perceived Stress Scale*, Sheldon, 1994) used in this research showed good psychometric properties. Bootstrapping method was used to provide accurate estimate of the specific indirect effects. Multiple mediating roles were checked by user-defined estimands analysis in AMOS. The results confirmed the hypotheses. The absolute fit indices emphasized the evidence for excellent fit of the specified model to the sample data. Multivariate analysis revealed a significant direct relationship between psychological resilience and university students' life satisfaction, even after controlling for the presence of meaning in life, perceived social support, and perceived stress. This study provides empirical support for the antecedents of the university students' life satisfaction. Practical implications and future research directions were discussed.

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## **Eudaimonic Well-being, Personal Values and Attitudes Towards Suicide among Polish Students in Helping Professions**

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**Keywords:** psychological well-being, attitudes, values, suicide prevention, positive psychology

*Background:* Attitudes towards suicide among gatekeepers are related to the quality of suicide prevention and are discussed to play a preventive role when suicide ideations occur [1, 2]. Attitudes and values, being central to normative cognitions are related to each other [3, 4]. Attitudes towards suicide and positive psychological functioning play role in life stressors appraisal [5, 6], however it is not known whether they are related to each other.

*Aim:* The purpose of the present research was to determine whether psychological well-being and life values of the prospective gatekeepers are associated with specific attitudes towards suicide, including its acceptance and readiness to prevent.

*Method:* The preliminary report was conducted on Polish Psychology, Law and Medicine students (n=239) who were tested with ATTS Attitudes Towards Suicide Scale, RVS Rokeach Values Survey and Ryff's Personal Well-Being Scale.

*Results:* Initial multiple regression analysis has identified psychological predictors of permissive attitude towards suicide. The settled model contained psychological components of well-being and several critical life values referring to person achievements and desired modes of conduct.

*Conclusions:* The study improves the state of knowledge regarding the relationship of well-being and attitudes towards end of life decisions.

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## Trajectories of Psychological Well-being across Lifespan: Sex Differences

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**Keywords:** psychological well-being, lifespan development, healthy lifestyle

*Background:* Psychological well-being (PWB) is one of the prominent approaches to understand internal mechanisms of one's happiness. One of the most challenging questions in the field of PWB is its lifespan trajectory. The results from cross-sectional studies show that some of the aspects of well-being increase with age (environmental mastery and autonomy), some decrease (personal growth and purpose in life), while others did not show any significant changes with age [1].

*Aim:* In our study we looked at basic demographic factors such as age and sex to estimate if psychological well-being is affected by them. The present study examines lifespan trajectories of the six dimensions of PWB in males and females. To date, some studies approached lifespan age of the PWB, few concentrated on gender differences, but the findings on the interaction of age and gender factors are limited.

*Method:* 395 adults aged 25-60 (123 males and 272 females) reported their psychological well-being using Ryff Psychological Well-being scale [2].

*Results:* Data was analyzed using MANOVA, Linear and Non-Linear regression. Results from MANOVA showed age differences for four factors of PWB structure: Autonomy, Personal Growth, Positive Relations with Others, Purpose in Life and Self-Acceptance. MANOVA analysis showed significant effect of age in both male and female samples for the factor Autonomy with a tendency to increase with age. T-test for independent samples within age groups identified significantly higher scores for women in early and middle adulthood, and similar scores in older adulthood. Using regression analysis we identified significant models of all six PWB factors' lifespan trajectories for male sample, and significant model of two PWB factors' – for female sample.

*Conclusions:* All PWB domains differed significantly in three cross-sectional age groups, except Environmental Mastery. Similar patterns were found for gender age groups with more pronounced differences in female group. Estimation of lifespan trajectories of PWB change in gender groups revealed certain patterns for all domains for male group. As for females, clear patterns were found only for Personal Growth and Positive Relations. Present study adds evidence to the gender differences in PWB and its factors across lifespan. These results, not pretending to establish fundamental tendencies and trajectories of PWB lifespan changes, reveal complicated trends of PWB from developmental and possibly cross-cultural perspectives.

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## The Experience Of Happiness on Peruvian Young Adults at Remunerated Work and Volunteer Work

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**Keywords:** millennials, remunerated work, volunteer work, happiness, phenomenological design

*Background:* In the last few years, researchers all around the world have focused on the importance of comprehending the nature, values and behavior of the young, educated and entrepreneurial population borned between the 80's and the 21<sup>th</sup> century usually called the "Millenials" as they represent the economic future [6, 7]. One important line of research within this specific population has been the emerging debate about the definition of "work". Traditionally, it has been understood that the concepts of "work", "payment" and "means of living" cannot be dissociated [1]. However, specifically young people have questioned this understanding, as the concept of "work" is multidimensional and its nature can be discussed incorporating new and refreshing views [2]. For example, non-remunerated work such as volunteer-work [3] has significantly increased in the last decade and the amount of young people donating their time and effort to altruistic activities has also significantly increased [4]. This huge change can be comprehended through the lens this new and broad concept of "work" has brought. Work does not mean only sacrifice, payment and a source for living, but also well being, sense of purpose, happiness, gratitude and meaning. Specifically, volunteer work has shown innumerable benefits for young people as it allows the individual to feel that he/she is part of something that trascends his/her own self and its important for society [5].

In Perú, due to the economical, social and political changes in the last 20 years, job-insertion has become a difficult situation for young people. However, paradoxically research has shown that this specific population (Peruvian millenials) is not looking for jobs to fulfill their economic interests but also their emotional and social needs such as well-being, sense of purpose and personal satisfaction. The low levels of job permanency of the millennial generation evidence this new necessity that has emerged globally in the last few years [8].

*Aim:* The present study aims to explore the qualitative experiential happiness perception at the remunerated work and the volunteer work; specifically similarities and differences that exist between remunerated work and volunteer work happiness experiences from young Peruvian millennials by using Seligman's theory about well-being and happiness which affirms that happiness is the conjunction of three different sources: Pleasant life, Engaged life and Meaningful life [9].

*Method:* The present study used a phenomenological design. Instruments: The present study used in depth interviews to study the happiness subjective experience of the participants [10]. Sample: Four university students between 22 and 26 years from Lima, Perú and all of them were working simultaneously on a remunerated job and on a a volunteer job in a non-profit organization.



*Results:* The present study shows that the definition of work cannot be only understood through the importance of the economic reward, as the emotional reward demonstrated to be more significant than the first one. The subjective experience of happiness is key for both contexts, remunerated and non-remunerated jobs. The need for transcendence and sense of purpose is very similar in both cases. However, the positive emotional experience was significantly higher in the volunteer work than the remunerated work.

*Conclusions:* The work experience for this young professional millennials is understood beyond the classic notion of an employment that provides income and economic safety. Instead, work is experienced as a space of identity accomplishment that creates sense on their lives, it empowers them and contributes to their dignity giving a pride feeling to them, and also it promotes the involvement on noble and sustainable social causes [11]. It is relevant to enhance the traditional Organizational Psychology perspectives with the approaches of the Work Social Critical Psychology, to branch out the dimensions of work's notion and lead them to a global vision that integrates other work modalities which are not necessarily adjusted to the employment category- as non-remunerated work. Across the qualitative methodology and the phenomenological design the study contributes to Organizational Psychology as an existential and deep approach supporting the limited research done about happiness at the Peruvian organizational context. Thus, promotes reflections which supports raising better work contexts enabled to fulfill the expectations and demands of the new young workforce, whereby also are expanded other traditionally studied concepts such as job satisfaction, commitment and engagement, working environment, among others. However, for a future study it might be of interest to consider the gender and profession implications for the analysis and also the length of time working in each work context – because may affect the perceived results about them. Finally, for future studies may be considered common workplaces to all the participants wherein might be complemented or confirmed the findings of this study.

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## **Status Alone is Not Enough: The Inspiration Information and Social Status Can Promote Self-regulation**

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**Keywords:** social status, inspiration information, self-regulation, self-control

According to the strength model of self-control [1], when individuals find a task that is important or relevant to their self-worth, they will invest more self-control resources in the task [2]. The current study aims to explore the effects of social status on people's interpersonal self-regulation.

Participants were randomly assigned to one of the following conditions:

Prime with a high-status other with inspiration information, a high-status other with no inspiration information, an equal-status other with inspiration information, or positive mood (control condition). Participants were then told that the stroop task could train their ability of perception and reasoning. The main dependent variable was the trials of stroop task completed.

The results indicated that neither status nor inspiration information alone could motivate participants. Thus is, participants would work harder and perform significantly better than participants in other conditions only when facing a high status other with inspiration information. Cultural factor and other implications were also discussed.

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## An Appreciative Inquiry Consultation and Positive Psychology Solutions for a Restructuring Community-based Parent and Child Centre

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**Keywords:** appreciative inquiry, positive organisational scholarship, human services, burnout, resilience

*Background:* The running of the parent and child centre was recently transferred to a consortium with direct management via a charity. UK government cuts have reduced the budget for providing services and some centres have closed. All employees were required to reapply for their positions. Following the re-distribution of the reduced number of roles there was increased negative emotions, anxiety and fear of further job cuts with a strong indication of susceptibility to burnout; a common problem for workers in human services [1, 2].

*Aim:* To consult with the centre management seeking to find positive psychology solutions for the wellbeing needs of their employees in the restructuring organisation.

*Method:* An appreciative-Inquiry [3] was undertaken with the objective of discovering and co-creating recommendations.

*Results:* The emerging needs were: team-building, team reflection of resilience, tools for mentoring and supervision including for emotional wellbeing.

*Conclusions:* Recommendations were made drawing from: positive organisational scholarship, which seeks to find what works in organisations [4]; flourishing theory [5]; drivers of work engagement [6] and psychological safety in highly effective team [7, 8].

### Acknowledgments

Thanks to, the organisation for their interest and co-operation in the consultation.

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## The Role of Self-Efficacy, Self-Control and Optimism/Pessimism in Adolescents' Health Protective and Health Risk Behaviors

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**Keywords:** adolescence, self-efficacy, self-control, optimism, health behavior

*Background:* A number of previous studies revealed that psychological factors are important correlates of health behaviors [1]. Certain aspects of personality may help develop health consciousness while others contribute to health risk behaviors [2]. Adolescence is a very critical life period because both health protective and health risk behaviors can be grounded for later life [3]. Dietary habits, drinking and smoking should be in the focus of research since all these may contribute to several serious illnesses [4, 5, 6].

*Aim:* We examined the role of self-efficacy, self-control, optimism and pessimism in relation to eating, drinking and smoking. First, we hypothesized that these behaviors are in inter-correlations. Then we also hypothesized that psychological scales may play different roles in health risk and health protective behaviors.

*Method:* Participants were 374 adolescents (48.4% boys) who studied in four different high schools in Szeged and Budapest, Hungary. Their mean age was 16.4 years (S.D. = 1.5 years). We used a self-administered questionnaire to explore the frequency of eating habits, alcohol consumption and smoking. Furthermore the following psychological scales were applied: General Self-Efficacy Scale (SE) [7], The 10-item Self-Scoring Self-Control Scale (SCS) [8] and the Revised Life Orientation Test (LOT-R) [9]. Using factor analysis we developed three factors of dietary habits: healthy (e.g., fruit and vegetable consumption) and unhealthy diet (e.g., eating sweets) and a special "junk food" diet (fast food, coke and energy drinks).

*Results:* The first hypothesis was confirmed: There were intercorrelations among the different forms of health behaviors. Second, our results justified that these psychological scales indeed play different role in health behaviors. Healthy eating had a positive relationship with self-efficacy ( $r = 0.21$ ;  $p = 0.001$ ) optimism ( $r = 0.17$ ,  $p = 0.001$ ) and self-control ( $r = 0.17$ ,  $p = 0.001$ ). On the other hand, we found a negative relationship between eating junk food and self-control ( $r = -0.28$ ,  $p < 0.001$ ). This latter scale also was negatively correlated with health risk diet (e.g., eating sweets;  $r = -0.21$ ;  $p < 0.001$ ). Finally, binge drinking ( $r = -0.28$ ;  $p < 0.001$ ) and smoking ( $r = -0.29$ ;  $p < 0.001$ ) were negatively associated with self-control.

*Conclusions:* We can conclude that there were strong intercorrelations among the items of health behaviors. Those who wanted to follow healthy diet also were health conscious in other ways. Psychological scales played different roles in health risk and health protective behaviors; optimism, self-efficacy and self-control were positively related to health conscious behaviors. While health risk behaviors were associated with the lack of self-control. All in

all, as it seems, personality is very important in adolescence to develop health consciousness. Thus health education programs should build on skills training to strengthen self-control, self-efficacy and optimism.

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## Dispositional Gratitude and Life Satisfaction among Older Adults: The Mediating Role of Present Time Perspective

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*Background:* In the last decade there has been considerable research on the relationship between dispositional gratitude (DG) and life satisfaction (LS) [1]. A number of empirical studies have shown positive and strong correlations between both variables across different populations [2-4]. Appreciative and thankful individuals tend to report being happier, more confident and satisfied with their lives than do their less grateful counterparts. Some other authors [5] have considered that experiences of gratitude might be related, possibly “even in a causal fashion” to life satisfaction.

*Aim:* Although the previous studies do powerfully illustrate that DG correlates with LS and is likely to be its meaningful predictor, the potential mechanisms involved in this relationship are still uncertain [6]. Taking into account that accessing positive memories of our past, living our present, and anticipating our future can enhance happiness and increase self-esteem [7], chose balanced time perspective (BTP) as possible latent variables implicated in the relationship between DG and LS.

*Method:* The research was conducted on the group of 75 older adults who completed *Gratitude Questionnaire-Six Item Form (GQ-6)*, *Satisfaction With Life Scale*, and *Modified Balanced Time Perspective Scale* [7]. The mean age of the respondents was  $M = 72.22$  with  $SD = 7.23$  (range = 60-89 years). Most were women (65%).

*Results:* The results illustrate a positive correlation between past, present, future, DG, and LS. Additionally, a linear regression showed that DG ( $\beta = 0.328$ ) and past ( $\beta = 0.280$ ) are two predictors of LS and explain the dependent variable in almost 21% ( $cR^2 = 0.213$ ;  $R = 0.484$ ;  $F_{74,2} = 11.028$ ;  $p = 0.000$ ). Therefore, the results suggest that levels of LS may be higher in individuals who notice and appreciate positive things in their lives, especially relating to the past. Finally, investigation of the mediating role of correlating dimensions of BTP in the relationship between DG and LS revealed that only total effect of present time perspective ( $\beta = 0.402 \rightarrow \beta = .316$ ;  $z = 2.234$ ;  $p < .05$ ) was significantly reduced upon the inclusion of present. In this case, effect of present on LS was reduced after controlling for personal religiousness. Therefore, testing mediation confirmed that present acts as a mediator.

*Conclusions:* Although elderly participants declared to live mainly in the past ( $M_{\text{past}} = 4.14$  vs  $M_{\text{present}} = 3.85$  and  $M_{\text{future}} = 3.56$ ), thus confirming some previous studies [8], it seems that concentration on the present in the context of gratitude may contribute to their LS. In fact, Zimbardo and Boyd [9] observe that even if we look for happiness in the past, the present, or the future, we experience happiness only now. A happy event may have taken place in the past, but we call it to mind in the present. Moreover, Lennings [10] points out that research with elderly indicate a mostly present-focused temporal orientation. Their dominant ways of viewing time often coalesce around a variety of present time perspectives.

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## Hope Mediates the Relationship Between Downstream Indirect Reciprocity and Dispositional Gratitude

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*Background:* Humans are particularly known for their eagerness to help people outside of their close circle of friends and allies [1]. One of the forms of such interactions is downstream indirect reciprocity (DIR). According to DIR, C helps A because A helped B, and C does not help A because A did not help B. A who helps others, gains a good reputation, and possibly will be helped by a third-party in the future, instead, A who does not help, acquires a bad reputation, and falls into disfavor [2-3]. Although, there is no research on DIR and gratitude, some scientists see certain similarities between both of them. For example, Jon Elster [4] speaks about “third-party gratitude” which occurs when C’s positive feeling toward A is caused by A’s helpful behavior towards B. In other words, when we see an individual performing a good action which affects someone else, we might judge such a behavior as worthy of appreciation and gratitude [5]. There is possible the existence of a link between DIR and hope, as well. Ballantine and Roberts underline [6] that even if we engage in a behavior where there is little chance of reciprocity from the beneficiary, our good gesture might enhance feelings of self-esteem, reputation or hope for the future benefit.

*Aim:* Although the prior studies prove that DIR is related to cooperation and altruism [2], a little is known about how DIR relates to dispositional gratitude (DG) and what is the mechanism underlying this relationship. Taking into account that hope (H) might be an unyielding motivating factor [7] we chose H as a potential variable involved in the relationship between DIR and (DG).

*Method:* The research was conducted on the group of 319 adults who completed *Downstream Indirect Reciprocity Scale (DIRS-11)*, *Gratitude Questionnaire-Six Item Form (GQ-6)*, *Basic Hope Inventory (BHI-R)*. The mean age of the respondents was  $M = 26.94$  with  $SD = 11.24$  (range = 17-74 years). Most were women (73%).

*Results:* The results illustrate a positive correlation between DIR and H ( $r = 0.133^*$ ), DG ( $r = 0.127^*$ ). Additionally, investigation of the mediating role of H in the relationship between DIR and DG revealed that DIR was significantly reduced upon the inclusion of DG ( $\beta = 0.363 \rightarrow \beta = .353$ ;  $z = 3.904$ ;  $p < .001$ ). Therefore, testing mediation confirmed that H acts as a mediator.

*Conclusions:* The outcomes received in this study seem to prove the existence of significant indirect effect of DIR on DG through H. We can assume that the tendency to indirectly reciprocate others in downstream manner might result from the belief that repaying another’s

generosity will, in turn, be rewarded by other observers [8]. Such an expectation is an example of hope. People who demonstrate higher levels of hope and have presumption on the orderliness and positivity of the world [9] are more grateful.

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## **IRONMIND A Program Designed to Broaden & Build the Psychological Immune System among Veterans of War**

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**Keywords:** resilience, broaden & build, war veterans

*Background:*

**‘I didn’t break - but, on the other hand, drew a lot of knowledge and learning with me on in my life. Others around me did the exactly opposite ... But, I was just lucky then?!? Why could I handle what we saw and did when the guy next to me couldn’t?!? - That question I have asked myself more than a million times. I haven’t found the right answer.’**

Denmark have been sending soldiers to war since the early nineties. Some of them has returned with psychological issues such as PTSD.

IRONMIND are a program using Positive Psychology in an intervention with veterans.

*Aim:*

The aim is to broaden & build the veterans so each one will have some tools to flourish and experience a higher level of well-being.

*Method:*

The program is built on five pillars.

1. Personalitytest and Culture in organisations
2. Cognition & Neuropsychology
3. Positive Psychology
4. Resilience
5. Hiking in the Norwegian Mountains

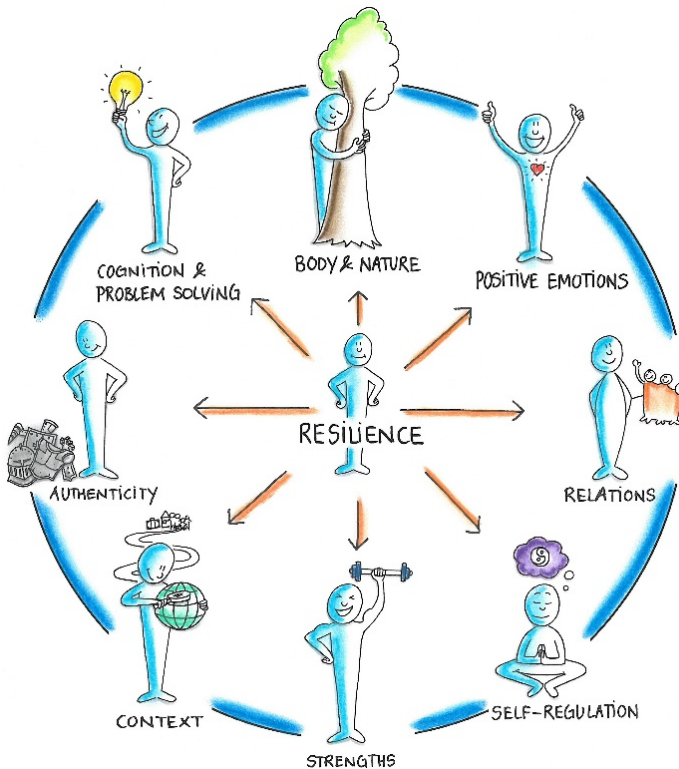
The results are built on (qualitative) interviews and feedback from the participants and a form (quantitative) where the individual have been measured himself in a questionnaire build on the eight factors in the MDT model, before and after the intervention.

*Results:*

‘Hi Christian. I just want to give a little feedback on the program. Today though the template for my inner puzzle has long been found, I don’t know whether to laugh or cry. My thoughts tell me that I should be sorry that it took 10-12 years before anyone had a rope that was long enough to reach me when I fell down in a black hole. But now I feel, for the first time, that I can see the light above my head, and for a long time I can actually SEE and REACH the rope that I for years have been looking for to get out of the hole... I know that I still have a long

way to go and I'm afraid that I'd use the rope incorrectly, but I also know that I'll probably learn along the way because I've decided to! And even though I should fall down some steps, along the way, I'll be fine!...To day was the first time I could see why my mind is as it is and that's a victory in itself'

*Conclusions:* The participants have benefitted from the intervention and the program. Some significant more than others. The current state of the individual and the past eg childhood, whether the financial situation is stable or not have an influence in the outcome. More research in that area are required.



**Figure 1.** The MDT Figure (Model for Mental Development and Training) consists of eight factors that are the content of the program.

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## Personal Meaning System; An Essential Component of Subjective Well-being among Adolescent Girls

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**Keywords:** personal meaning system, subjective well-being, adolescent girls, qualitative research

*Background:* While adolescence is an important transitional stage especially for girls, a few studies have so far addressed the important role of personal meaning system in Subjective Well-Being (SWB) of adolescent girls.

*Aim:* The aim of the present study was comparing the differences in phenomenological worlds of two groups of Iranian adolescent girls with high and low SWB.

*Method:* In this qualitative research, for studying the differences in subjective worldviews of girls with high and low SWB, intensity sampling was utilized for choosing girls who perceived their well-being at high or low level. Considering adolescents in their natural environment, school counselor reflections, family, peers or school reported information and self evaluations in life satisfaction ladder and also overall happiness questions were used to select girls from two ends of the spectrum. Then, a) in depth interviews with 10 girls as key informants (5 in low range and 5 in high range of SWB), and their families, school counselors or friends, b) incomplete sentences (37 girls), and 3) narrative writing (32 girls), were considered for data gathering along with observational and reflexive notes of the researcher about them. Thematic analysis proposed by Braun & Clark (2006) was used for analysing the gathered information from different data gathering stages regarding the components of trustworthiness in a qualitative study.

*Results:* On this path, five themes including emotional competence, power of ego, personal meaning system, emotional relationships and perceived social support, and their approach while encountering difficulties were considerable. From among these themes, personal meaning system was one of the most important themes and it was related to the difference between the attitudes, beliefs and thought context of girls with high and low SWB. The difference in cognitive meaning-making in adolescent girls with higher and lower subjective well-being was based on optimism/pessimism, mental flexibility, spiritual beliefs, internal/external locus of control, and relative/absolute outlook which is discussed in details in the paper. These sub-themes were discussed based on cultural and theoretical frameworks.

*Conclusions:* findings highlight the importance of taking into consideration the concept of personal meaning system as a cognitive and affective system including its subthemes in designing programs that are focused on increasing adolescent girls' subjective well-being.

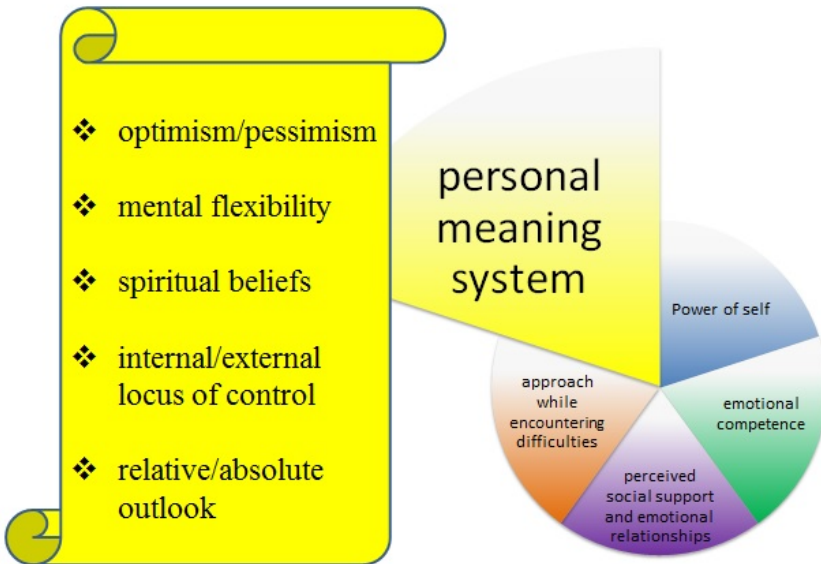


Figure 1.

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## **EPOCH Measure of Adolescent Well-being in an Iranian Sample: Psychometric Characteristics**

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**Keywords:** Iranian adolescents, well-being measure, psychometric characteristics

*Background:* During the last decade, there has been a growing interest in Well-being as the main topic of Positive Psychology approach across the lifespan. Most of the measurements have focused on adults; however, adolescence is a critical and unique period. EPOCH measure of adolescent Well-being (Kern, Benson, Steinberg, and Steinberg, 2015) is a considerable measurement which assesses five positive psychological characteristics including Engagement, Perseverance, Optimism, Connectedness, and Happiness.

*Aim:* The aim of the present study was to investigate the psychometric properties of the Persian translated of EPOCH Measure of Adolescent Well-being.

*Method:* After translation and back translation of EPOCH, the Persian version of this measure was reviewed by a group of Peers (3 translators in schools) and also a group of five bilingual adolescents. A wide sample of 1095 adolescent students (591 girls, 504 boys) completed EPOCH as well as other related scales. Students of this sample were as much as variate in socio-economic levels, academic achievement, and family structure. Psychometric properties of EPOCH were assessed using Construct Validity, Convergent Validity, and Internal Consistency.

*Results:* The results of exploratory factor analysis revealed factorial structure in Iranian sample and accounted for half of the variance. Coefficient alpha estimates of internal reliability were between .61 and .81 for the subscales. Significant positive coefficients between subscale of measure of Adolescent Well-being and Multidimensional Students Life Satisfaction Scale (MSLSS: Huebner, 1994) and Psychological Capital Questionnaire (Academic PsyCap: Luthans, Avolio, Avey, and Norman, 2007) confirmed the convergent validity.

*Conclusions:* These findings indicate that EPOCH measure of Adolescent Well-being can be considered as a reliable and valid scale to some aspects of adolescents' well-being in Iranian samples.

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## A Study of the Influence of Resilience and Causal Attribution Style on Happiness

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**Keywords:** resilience, causal attribution style, happiness

*Background:* What defines happiness in the subjective aspects of people's lives and general life is called subjective well-being. Studies by Hashimoto et al. (2011) point out that people high in optimism may improve subjective well-being even when they encounter hard stressors. Many previous studies suggest that one's strengths and resilience have a positive influence on subjective well-being. Therefore, it seems that individual personality characteristics work well to increase happiness.

*Aim:* This study aimed to examine the relationship between resilience and happiness and to consider the association between personal causal attribution style and happiness.

*Method:* The participants were 116 university students (46 male, 67 female, unsigned 3) who responded to survey questionnaires. The scales used were the attributional styles (Higuchi et al., 1981), subjective well-being (Ito et al., 2003), bi-dimensional resilience (Hirano, 2010), and interdependent happiness (Uchida, 2014) scales. There were four.

*Results:* First, participants were asked for correlation among subjective well-being, innate resilience, and acquired resilience. It was recognized that both innate and acquired resilience correlated positively ( $r = .645, p < .001$ ), ( $r = .507, p < .001$ ) with subjective well-being. Additionally, participants were asked for each correlation among interdependent happiness and both innate and acquired resilience. It was confirmed that both innate and acquired resilience correlated positively ( $r = .551, p < .001$ ), ( $r = .561, p < .001$ ) with interdependent happiness. Next, one-way analysis of variance was conducted with subjective well-being and interdependent happiness as dependent variables and, attributors to task success and task failures, and attributors to friend positives and friend negatives as independent variables. As a result, the attribution of task success to interdependent happiness was significant ( $F [4, 105] = 4.347, p < .005$ ). Multiple comparison by the Tukey method revealed a significant difference between "effort" and "difficulty of doing task."

*Conclusions:* The results of this study suggested that there is a correlation between resilience and happiness. In the task success scenario, those who attributed causal attribution to "one's efforts" had a high score for interdependent happiness. From this, it seems that people high in resilience in a high-stress situation may feel happier than those low in resilience. Additionally, those who attributed the cause to one's efforts have a high sense of satisfaction when the task is successful. This will also affect satisfaction with interpersonal relationships, and those who attribute success to their own efforts will experience enhanced sense of happiness in interpersonal relationships.



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## Downstream Indirect Reciprocity Scale (DIRS-11): Initial Construction and Validation

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*Background:* Downstream reciprocity (DR) occurs when an individual who has helped another person in the past is subsequently helped by a third party (*John helps me because I helped you*) [1]. In other words, subject A helps B, making it more likely that C will later help A ( $A \rightarrow B$  and  $C \rightarrow A$ ) [2]. Some field experiments [3] confirm that those who help others tend to obtain a good reputation, and this enhances the likelihood that someone else will help them when they need it. Conversely, if someone is observed declining to help, this damages their reputation and the chances that others will help them [4]. The common conviction that people receive what they deserve in life [5] refers to a belief in existence of a just world [6] which is expressed in the confidence that particular situations are the result of the individual's previous actions, both good or bad. DR seems to be one of the major mechanisms that explain the maintenance of cooperation between non-relatives [7].

*Aim:* To the best of our knowledge, there is no questionnaire which serves to assess beliefs illustrating behavioral dynamics typical to DR. Therefore, the aim of the study was to develop and test a generic scale that can be used to quantitatively measure this construct.

*Method:* To develop an item pool, we first studied the literature about DR. Initially, we constructed a pool of 12 items which were formulated as declarative statements (ex.: "When I help someone, benefit comes back to me from another person"; "The good deeds that people have done return to them suddenly and sometimes with double strength"; "Each action will come back to me in the future through other people"). Responses were made on a 7-point frequency scale ranging from 1 (totally disagree) to 7 (totally agree). The research was conducted on the group of 317 participants. The mean age of the respondents was  $M = 21.16$  with  $SD = 2.16$  (range = 17-74 years). Most were women (73%).

*Results:* With the help of the Jamovi package, a confirmatory factor analysis was carried out. The first model, after dropping one item out because of its loading not exceeding 0.7, specified a single factor model which showed a satisfactory fit indices [ $\chi^2(40) = 129$ ;  $p < 0.001$ ; CFI = 0.967; TLI = 0.954; SRMR = 0.0288; RMSEA = 0.0846]. In its final version, Downstream Indirect Reciprocity Scale (DIRS-11) consists of 11 statements and represents a univariate structure with very high reliability ( $\alpha$  Cronbach's = 0.940) confirmed in other studies as well. DIRS-11 correlates positively with hope, self-esteem, gratitude, life satisfaction, religious intensity and identity styles.

*Conclusions:* The current study was designed to develop and validate a new self-report measure that provides an estimation of belief in downstream reciprocity dynamics. The aim was also to demonstrate preliminary tests of its reliability. As hypothesized, the DIRS-11 demonstrates a conceptual meaningful factor which accounted for approximately 65% of the variance.

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## Downstream Indirect Reciprocity and Life Satisfaction: The Mediating Effect of Dispositional Gratitude

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*Background:* Downstream indirect reciprocity (DIR) is a major mechanism responsible for the maintenance of cooperative behavior among unrelated individuals. It leads to conditional collaboration according to social norms that favor the good (those who deserve to be rewarded because they have helped someone) and the bad (those who should be punished because they have refused to help) [1]. An individual who helps, acquires a good reputation and attracts aid from third parties, an individual who does not help, obtains a bad reputation and does not acquire assistance [2]. In this context, DIR seems to have a lot in common with the “Belief in a Just World” theory (BJW) which states that people get what they deserve [3]. Consistent with DIR characteristics Lerner’s “just-world hypothesis”, people not only intuitively have a need to believe they live in a just world, but also want to live “with a sense of trust, hope, and confidence in their future” [4]. On the basis of these promises, it can be expected that DIR, just like BJW, is linked to various dimensions of subjective well-being [5; 6].

*Aim:* Although the prior studies [5] do strongly demonstrate that BJW is associated with LS and is likely to be its important predictor, Jiang et al. [7] point out that beyond the superficial relationship between both, a little is known about the mechanism underlying how BJW affects subjective well-being. By analogy, we assumed that DIR could not only correlate with LS, but their relationship could be mediated by some other variables. For example, dispositional gratitude (DG) might emerge as a result of feeling thankful for the kindness of others and might lead to LS [8].

*Method:* The research was conducted on the group of 319 adults who completed *Downstream Indirect Reciprocity Scale (DIRS-11)*, *Gratitude Questionnaire-Six Item Form (GQ-6)*, *Satisfaction With Life Scale*. The mean age of the respondents was  $M = 26.94$  with  $SD = 11.24$  (range = 17-74 years). Most were women (73%).

*Results:* The results illustrate a positive correlation between DIR and DG ( $r = 0.363^{**}$ ), LS ( $r = 0.213^{**}$ ). Additionally, investigation of the mediating role of DG in the relationship between DIR and LS revealed that DIR was significantly reduced upon the inclusion of DG ( $\beta = 0.213 \rightarrow \beta = .115$ ;  $z = 5.162$ ;  $p < .001$ ). Therefore, testing mediation confirmed that DG acts as a mediator.

*Conclusions:* The obtained results seem to prove the existence of significant indirect effect of DIR on LS through DG. This mediating role of DG on DIR-LS link can be interpreted as a life orientation toward grasping and appreciating positive things in the world that, in turn, promotes and enhances subjective well-being [7]. In fact, we think that someone completely without a sense of DIR cannot feel grateful. At the same time, gratitude often involves reciprocity, provides sense of stability, order, fairness, and meaning, leading to satisfied life.

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## The Two Faces of Passion: Harmonious and Obsessive Passions in the light of Need Fulfillment Profiles

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**Keywords:** Dualistic Model of Passion (DMP), harmonious passion (HP), obsessive passion (OP), need fulfillment profiles, positive and negative affect

*Background:* Throughout our lives, we are engaged in a myriad of activities and the quality of activity engagement greatly defines several life aspects. One such form of activity engagement is rooted in the Dualistic Model of Passion which defines passion as a strong inclination for an activity that one loves, finds important and in which time and energy is invested [1]. The model proposes the existence of two types of passions: harmonious (HP) and obsessive (OP) with the former being associated with positive, adaptive outcomes, whereas the latter with negative, maladaptive outcomes. Although several studies were conducted to uncover the potential predictors of HP and OP, less emphasis has been paid to the three basic psychological needs of autonomy, competence and relatedness whose satisfaction and frustration is crucial for human functioning as posited by the Self-Determination Theory [2].

*Aim:* The present study examined how basic psychological needs could predict HP and OP for popular online activities such as Facebook use, series watching and online gaming. These activities deserve scientific attention, given that people are highly engaged in these activities.

*Method:* Due to the complex representation of need fulfillment, a novel person-centered approach, latent profile analysis [3] was used to identify distinct profiles (or subgroups) of individuals based on the combination of different need dimensions. Based on responses from a total of 1094 individuals (746 females;  $M_{\text{age}} = 26.00$ ,  $SD_{\text{age}} = 7.69$ ), we investigated how the different need fulfillment profiles predict HP and OP.

*Results:* Four distinct need fulfillment profiles were distinguished: (1) all needs are highly satisfied, (2) only relatedness is satisfied, (3) all needs are moderately satisfied, and (4) all needs are frustrated. These profiles differ from one another as a function of OP, but not HP. Members of the “frustrated profile” had the highest mean on OP, while the “highly satisfied” group had the lowest. The construct validity of the profiles was further supported by the profile predictors of perceived interpersonal behaviors and the profile outcomes of positive and negative affect.

*Conclusions:* An important antecedent of passionate activity engagement is whether one’s basic psychological needs are fulfilled or not; that is, low levels of need fulfillment are associated with rigid engagement in the form of OP which may be interpreted as a compensatory behavior for unfulfilled needs. The results are discussed in the light of theoretical and applied implications.

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## **The Effects of certain Personality Factors on Sales People's Subjective Wellbeing, Job Satisfaction and Organizational Stress Perception: The Tendency Research in Georgia**

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**Keywords:** job satisfaction, optimism, sales professional, well-being, coping

Employee satisfaction, is one of the main aspects of human resource management, because it is a strong predictor for productivity, responsiveness and quality in customer service. Other important issues in HR are to retain best sales people, who support business and minimize turnover.

Research of workplace subjective well-being and job satisfaction of sales agents has never been conducted in Georgia and this is the first scientific study of its type. It was a tendency research to evaluate the effect of subjective personal factors like: subjective wellbeing, optimism, coping strategies, level of organizational identification and some socio-demographic factors such as gender, relationship status and age on the perception of organizational stress and job satisfaction. Within the framework of the research 102 sales agents of 5 different business companies (mean age 21) were surveyed. The study methods were: Stress inventory from American institute of stress, Mael and Ashforth organizational identification scale, Lyubomirsky and Lepper subjective happiness scale, Scott Macdonald and Peter MacIntyre generic job satisfaction scale, Coping Styles Questionnaire (CSQ) from Roger and Scheier and Carver Life Orientation Scale. The results show negative correlation between job satisfaction and organizational stress and positive effect of optimism, organizational identification and coping styles on job satisfaction and stress perception. There is no correlation between relationship status in private life and job satisfaction. The results show that subjective happiness has positive correlation with job satisfaction in female sales agents and shows no correlation in male sales agents.



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## **Ikigai and Subjective Well-being in University Students from Japan and Hungary**

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**Keywords:** ikigai, subjective well-being, university students, cross-cultural comparison

*Background:* Ikigai representing a Japanese approach to eudaimonic well-being evoked great interest in researchers and lay public from different countries. The examination of construct validity of ikigai may help to understand the applicability of ikigai construct across countries.

*Aim:* The construct validity of ikigai was tested in two steps: (1) the measurement models of ikigai in Japanese and Hungarian students were tested; (2) the associations between ikigai and similar constructs such as well-being, sense of coherence, and social support in Japanese and Hungarian students were investigated.

*Method:* In a cross-sectional study, 259 Japanese and 279 Hungarian students answered a questionnaire including an ikigai scale, the WHO-5 well-being index, a sense of coherence scale and a social support measure. The newly developed ikigai scale covers three dimensions such as positive affect, striving for future development and meaningfulness of personal life [1].

Measurement models of ikigai were tested with confirmatory factor analysis (CFA). CFA with covariates analyses were applied to test the association of ikigai with similar constructs.

*Results:* The three-factor model of ikigai indicated good fit in both the Japanese and the Hungarian samples, however, only the configural measurement invariance was supported. The three dimensions of ikigai correlates strongly ( $r$ s are above 0.69) in Japanese sample, however only positive affect and meaningfulness correlate strongly ( $r=0.81$ ), striving for future development correlates with positive affect and meaningfulness weakly (0.29, 0.31 respectively) in the Hungarian sample.

As for the CFA with covariates analysis in the Japanese sample, positive affect is significantly linked to well-being index ( $\beta=0.56$ ), sense of coherence ( $\beta=0.19$ ), social support ( $\beta=0.30$ ). Striving for future development is associated only with well-being index ( $\beta=0.38$ ), age ( $\beta=0.13$ ), and social support ( $\beta=0.35$ ). Meaningfulness of personal life is associated with well-being index ( $\beta=0.49$ ), age ( $\beta=0.10$ ), sense of coherence ( $\beta=0.15$ ) and social support ( $\beta=0.29$ ).

In the Hungarian sample, positive affect is significantly associated with well-being index ( $\beta=0.53$ ), being female ( $\beta=0.12$ ), sense of coherence ( $\beta=0.36$ ) and social support ( $\beta=0.20$ ). Striving for future development is associated only with well-being index ( $\beta=0.23$ ). Meaningfulness of personal life is associated with well-being index ( $\beta=0.23$ ) and sense of coherence ( $\beta=0.31$ ).

*Conclusions:* Ikigai seems to be a more unified construct in the Japanese sample than in the Hungarian sample. The construct validity of ikigai is supported in both samples.

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## Influence of Perceived Parental Relationship and Self-Discrepancies on Self-Conscious Emotions

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**Keywords:** self-conscious emotions, parental relationship, self-discrepancy

*Background:* The self-conscious emotions (i.e., guilt, shame, and pride) are the products of self-evaluative processes [1] and develop as a result of the socialization process [2]. Throughout these processes, children learn emotional consequences of their behaviors, and then convert these externally expected values into internalized self-standards, which eventually shape the formation of different self-representations [3]. From the perspective of self-discrepancy theory, discrepancy between these self-representations leads to specific types of emotional reactions. Specifically, the failure to attain standards of ideal self might lead people to be ashamed, while the violation of standards of ought self might lead people to experience a sense of guilt and self-criticism [4]. Therefore, it can be proposed that the proneness to experiencing specific kind of self-conscious emotions would be closely related to the perceived parental relationship during the socialization process, and the discrepancies between different types of self-representations.

*Aim:* The present study aimed to investigate the association of self-conscious emotions (i.e., shame, guilt, and pride) with four dimensions of perceived parental relationship from Rogerian perspective (i.e., empathy, level of regard, unconditionality, and congruence) and different types of self-discrepancies (i.e., ideal, undesired, ought, and ought/other self-discrepancies).

*Method:* 572 Turkish adults, 365 of whom were female, participated in the study.

*Results:* To examine the factors associated with self-conscious emotions, three different hierarchical regression analyses were conducted. According to the findings, maternal empathy, paternal level of regard, and maternal unconditionality were found to have negative associations with shame. The maternal empathy was also negatively associated with guilt. Paternal and maternal empathy was positively associated with pride. Furthermore, being proximate to undesired self, and distant from ought self were found to be closely related to shame and guilt; while being close to the ideal and ought self was related to the experience of higher levels of pride.

*Conclusions:* The study emphasizes the role of perceived parental relationships and self-discrepancies on the experience of self-conscious emotions. These results might provide clinicians with some useful guides during the course of therapy.

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## **A Meaningful Intermediate Link: Meaning in Life Mediates the Relationship between a Balanced Time Perspective and Mental Health**

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**Keywords:** balanced time perspective, meaning in life, hedonic wellbeing, eudaimonic well-being, personality

*Background:* Both Balanced Time Perspective (BTP) and meaning in life (MIL) are important concepts in contemporary, especially positive psychology and both are theoretically and empirically linked to higher levels of hedonic and eudaimonic wellbeing. From a theoretical stance, all time-zones are involved in meaning-making: E.g., autobiographical reflections, enabling the emergence of thematic and coherent life narratives (past), flow-experiences, expressing gratitude and mindful engagement with the social and natural environment (present), and a sense of hope, direction and purpose (future) should all contribute to subjective sense of MIL. We further developed the Balanced Time Perspective Scale<sup>1,2</sup>, which included a positive past and a positive future subscale by adding a present dimension. The resulting modified Balanced Time Perspective Scale (mBTPS)<sup>3</sup> differs from the Zimbardo Time Perspective Inventory (ZTPI), the most frequently applied time perspective measure, in that the mBTPS includes a mindfulness- and flow-based present perspective scale and a future scale which associates the personal future to positive emotional states such as hope and optimism in the present, while the ZTPI measures a hedonistic and a fatalistic view on the present and a view on the future that is not explicitly linked to positive affect or healthy motivation.

*Aim:* Because of these differences between the measures, we assume that BTP, operationalized via the mBTPS, defined as a frequent and equal tendency to think about one's past, present, and future in positive ways, has stronger ties with MIL than the ZTPI-based BTP indicator. Further we hypothesize that MIL may be one intermediate link between BTP and mental wellbeing. To address the notion that BTP's relationships with MIL and wellbeing may merely be a by-product of its shared variance with personality, we control for Big 5 traits.

*Method:* We administered the mBTPS, the ZTPI, the MIL Questionnaire, the Mental Health Continuum – short form and the Big Five Index to 192 people from the Houston Texas Area (141 females; age: 19-88; M = 40.05; SD = 17.53). We added the mean scores of the three subscales of the mBTPS to operationalize BTP with the mBTPS and we used the DBTP, multiplied with -1 (to indicate proximity to BTP) to operationalize BTP with the ZTPI.

*Results:* As expected mBTPS BTP, ZTPI BTP, MIL, and hedonic and eudaimonic wellbeing were positively interrelated. mBTPS BTP predicted MIL and mental wellbeing in regression analyses beyond personality and ZTPI BTP. mBTPS BTP's effect on wellbeing was reduced by the inclusion of MIL. In SEM, MIL partially mediated between mBTPS BTP and wellbeing even when controlling for personality and ZTPI BTP.

*Conclusions:* The present study supports the construct validity of the mBTPS and suggests that a subjective sense of presence of meaning in life may be supported by mindful and positive attitudes towards future, present and past, and MIL may be one link between BTP and mental wellbeing.

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## **The Modulation of Degree of Certainty and Negative Anticipation on Cognitive Performance in Anxiety**

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The ability to use information about our current state and environment to predict the future allows us to increase the odds of desired outcomes. This ability is directly related to our level of certainty regarding future events. Uncertainty diminished how we can prepare for the future, and thus contributed to anxiety. Here we defined anxiety as anticipatory affective, cognitive, and behavioral changes in response to uncertainty about potential future occasions. We used the classical cue paradigm in four experiment of group design 132 participants recruited to detect the modification of the degree of certainty and the valence of anticipation of future occasions on anticipatory processes under normal or the anxiety state.

A cue provided information of the valence of the upcoming target picture with 75% validity, 50% validity or 25% validity in the four experiments. In Exp1, we firstly presented a cue(3500ms) telling whether the picture is negative or neutral after a 500ms interval, and asked participants to respond to the short dash above or below the picture. In exp2, we used the same design in exp1 while the only difference is that the negative picture was changed by positive pictures. In exp3, we induced anxiety state of participants by asking them to watch the video and then perform the experiment tasks the same as exp1. In exp4, the same manipulation was performed as exp3, except the experiment tasks was the same as exp2.

Results showed significant difference of the performance when the anticipatory targets were negative while not positive. Under the anxiety condition the reaction time for 50% certainty is significant smaller than that for 75% and 25% certainty, but no such significant differences were found under the normal states. Under the normal states the RTs for negative anticipation is smaller than those for neutral anticipation under the condition of 50% certainty, while under the anxiety states the RTs for negative anticipation were larger than those for neutral anticipation under the condition of 50% and 75% certainty.

The results indicated that anticipation of negative targets will impede the cognitive performance under the anxiety states while facilitate the cognitive performance under the normal states. The degree of certainty affected the behavioral performance under anxiety stats while not under the normal states. Our results showed that the degree of certainty associated with the probabilistic pre-cue valence of the upcoming target affected the performance of the anticipatory processes in anxiety.

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## Virtues and Forces: a Dialogue between Positive Psychology and Behavior Analysis

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**Keywords:** positive psychology, virtues, forces, behavior analysis

*Background:* Positive Psychology, idealized in 1998 by Martin Seligman, (with later co-authorship by Mihaly Csikszentmihalyi and Christopher Peterson) aims to work with positive aspects that have been neglected by traditional Psychology which basically focused on negative and pathological aspects. Seligman developed a theoretical model to understand well-being (PERMA) and together with Peterson, as a complementary response to DSM, they created the Values in Action Classification of character Strengths and Virtues, known as VIA. VIA comprises 24 positive character traits (strengths) classified according to 6 virtues (Wisdom and Knowledge, Courage, Humanity, Justice, Temperance and Transcendence).

*Aim:* To understand forces and virtues according to the perspective of Skinner's behavior analysis.

*Method:* Theoretical analysis.

*Results:* It is possible to understand strengths and virtues and define them operationally from the Behavior Analysis point of view; only the virtues will be presented here. Wisdom/knowledge: process of observation/self-observation and description/self-description of variables relating to a target behavior; Courage: open or concealed operants involving the possibility of acting even in the face of possible punishment; Humanity: creating reciprocal positive reinforcement contingencies in a social environment; Justice: emitting operants determined by control agencies; Temperance: behaving in such a way as to avoid aversive consequences; Transcendence: emitting behaviors coherent with rules and self-regulation in relation to the broad meaning of life, having positive reinforcers as their consequences.

*Conclusions:* Positive psychology theory and practice are increasingly expanding and it is possible to understand positive psychology from the perspective of behaviour analysis principles. The conclusion is reached that these two areas have converging ideas and complementary theoretical assumptions, and that Skinner had pointed to interesting evidence regarding the quest for well-being and happiness ever since his book *Walden II* (1948). The importance of the concept of positive reinforcement and verbal community for understanding and applying virtues and forces can be seen and this paper can assist with their operational definition and practical application.

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## The Role of a Brief Purpose Diary in Reducing Lifestyle Driven Health Conditions

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**Keywords:** purpose, autonomous motivation, journaling, health behavior, cognitive bias

*Background:* Behaviourally determined health conditions known as non-communicable diseases (NCDs) are responsible for almost 70% of world deaths and can drastically reduce duration and quality of life [1]. Growing evidence suggests information-based campaigns overestimate the human capacity to maintain cognitive effort [2,3]. This problem is further compounded by psychological reactance; a documented response to authoritative discourse regarding healthy lifestyle behavior [4,5]. Consequentially, interventions which aim to bypass the need for conscious engagement have gained traction in healthcare legislation [6]. However, such initiatives are also limited in that they are restricted to settings that policy makers are able to manipulate. This presents the need for interventions that can effectively facilitate health behavior, across temporal and spatial domains.

*Aim:* The present research aimed to evoke enduring and automatic health behavior by considering the role of autonomous motivation and cognitive bias modification, as well as the relationship between these variables. Building upon seminal research that employed a diary intervention to promote subjective wellbeing [7], and recent work documenting an association between one's sense of purpose in life and physical activity [8], the current study investigated the use of a brief purpose journal to promote physical health.

*Method:* 37 participants used a daily diary in which they wrote about how their daily activities were purposeful, for the duration of one week. This involved reflecting on how singular behaviours contribute toward superordinate goals, and are self-transcendent. A further 30 participants used a neutral diary in which they wrote about the first event of their day. We hypothesized that participants using the purpose diary would increase the number of eudemonic pursuits they engaged in, or would derive meaning from their usual activities to a greater extent. Participants who subsequently possessed a stronger sense of purpose in life would attach greater value to their long-term goals, and be more inclined to protect their physical health. Pre-, post-test and follow-up measures of health behavior and psychological wellbeing were administered, to measure these effects.

*Results:* A mixed-measures ANOVA revealed a significant interaction between condition and time-point on scales of purpose in life and autonomous motivation for physical health. Planned comparisons revealed these effects were driven by significant gains between pre- to post-, and pre- to follow-up tests in the experimental condition only.

*Conclusions:* These findings suggest interventions which target psychological mechanisms that are indirectly associated with adaptive health behavior may be an effective method of enhancing communal physical health. This is potentially due to their influence upon more enduring forms of motivation, and their capacity to facilitate an implicit response to environmental health cues.

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## Happiness Superiority Effect During Dynamic Emotion Recognition among Socially Anxious People

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**Keywords:** emotion recognition, individual differences, positive expressions, visual attention

*Background:* People are able to detect happiness easier than anger [1]. We tend to avoid faces which express annoyance, and we are attracted to those who smile [2]. Happiness superiority effects in visual search reflect extensive visual attention to positive stimuli [3]. Several studies demonstrated biases in attention to both positive and negative facial expressions in social anxiety in relation to fear of evaluation [4].

*Aim:* The aim of the study was to capture visual processing of dynamical facial expressions during recognition of anger, sadness and happiness. We examined if there we could detect differences in speed and accuracy of recognition between faces expressing motion of positive and negative signals. Consequently, we measured if there are differences in detecting happiness between anxious and non-anxious groups.

*Method:* Forty-eight participants (including 24 anxious) were presented with 18 video clips of facial expressions changing in time from neutral to either a happy, sad or angry expression. The participants' task was to press a space bar as soon as they recognized the displayed emotion. Next, they chose the emotion they recognized.

*Results:* Results showed that happy faces were recognized significantly faster and with higher accuracy than sad or angry faces. However, the socially anxious group was on average significantly slower in their recognition decisions.

*Conclusion:* Research indicates the utility of using dynamics to describe differences in reaction to each perceived emotion. We demonstrate the happiness superiority effect in the processing of emotional stimuli. Our major finding is that compared to higher vigilance to static stimuli among socially anxious people [5], their response to dynamic stimuli was slower. This indicates that socially anxious people mentally exhibit an aversion to recognizing naturally arising signals (e.g., smile). This emphasizes the necessity of measuring further the process of detecting facial signals in dynamic conditions.

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## Coaching Character Strengths and Mindfulness for Achieving Flow in Tennis Performance

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The aim of the research is to explore whether an intervention program that develops character strengths and mindfulness during tennis coaching sessions improves the performance of amateur tennis players. Tennis is a game of two parts, the physical game and the mental game which Gallwey (2015) calls the *Inner Game* of tennis. While most players at club level can deal with the physical game, it is the mental game that can result in a poorer performance and the difference between winning and losing a match. Whilst a lot of research exists within the sports psychology literature and on mindfulness, there is little that examines character strengths and mindfulness in sports performance. One program that does look at strengths and mindfulness is Ryan Niemiec's (2013) Mindfulness-Based Strengths Practice (MBSP).

Using the MBSP program and applying it to sport, coaching sessions lasting in 90 minutes duration will be carried out by the researcher (who is a qualified tennis coach) with a group of amateur tennis players over the course of 8 weeks between April and May 2018. Incorporated within the program is the VIA Strengths Assessment, which participants will be asked to complete at the start of the sessions. Participants will be invited to keep a record of their experiences in a paper/electronic journal. In addition, semi-structured interviews will be carried out with each participant after the 8 weeks. The data from the interviews will be analysed using Thematic Analysis to explore the relationship between strengths and mindfulness practice in playing tennis, as well as to examine the effectiveness of the MBSP program in a sports-based environment. Any preliminary findings will be presented at the conference.

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## Testing the Validity of Interpersonal Behaviours Questionnaire in a Japanese Sample

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**Keywords:** self-determination theory, significant others, need-supportive/thwarting behaviours, well-being

*Background:* Recent research on the self-determination theory, in line with the integrative trend within positive psychology, has shifted its focus from how the satisfaction of three basic psychological needs (autonomy, competence, and relatedness) promotes well-being to how need frustration could lead to ill-being, and the differential effects of these two facets (Sheldon, 2010). The effects of satisfaction and frustration of three basic psychological needs on well-being/ill-being have been demonstrated with people of diverse cultures. Nevertheless, it is possible that certain behaviours that support or thwart basic psychological need satisfaction might differ according to the culture.

*Aim:* We validated the Interpersonal Behaviours Questionnaire (IBQ; Rocchi et al., 2017), which is designed to simultaneously assess both (perceived) need-supportive and need-thwarting behaviours with a sample of Japanese college students, and compared the results with the study by Rocchi et al. (2017) using a Canadian sample.

*Method:* Japanese college students (N = 183) were asked to complete a questionnaire package comprising the following scales: (1) Japanese version of IBQ; (2) Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS; Japanese version by Nishimura & Suzuki, 2016); (3) Satisfaction with Life Scale (SWLS; Japanese version by Oishi, 2009); and (4) Positive and Negative Affect Schedule (PANAS; Japanese version by Kawahito et al., 2011).

*Results:* Confirmatory factor analysis indicated that the 6-factor model had the best model fit compared to the 2-factor (need-supportive/thwarting behaviours) and the 3-factor models (autonomy/competence/relatedness related behaviours). Moreover, all three need-supportive behaviours were positively correlated with satisfaction of basic psychological needs, positive affect, and life satisfaction, whereas need-thwarting behaviours were positively correlated with frustration of basic psychological needs, negative affect, and depression (see Table 1). Thus, it was concluded that the IBQ is a valid scale for assessing perceived need-supportive/thwarting behaviours in Japanese college students.

Furthermore, comparison with the results of Rocchi et al.(2017) indicated that all need-supportive behaviours scores were significantly lower ( $t(720)=3.04, 13.60, 13.56$ , all  $ps<.01$ ,  $ds>.24$ ), whereas need-thwarting behaviour scores were significantly higher in Japanese college students ( $t(784)=6.46, 12.11, 5.42$ , all  $ps<.001$ ,  $ds>.46$ ). Also, different from the results of Rocchi et al. (2017), autonomy/competence thwarting behaviours did not significantly correlate with positive affect. Finally, negative affect correlated only with autonomy/relatedness thwarting behaviours.

*Conclusions:* These results indicate that the Japanese version of IBQ is a valid scale for assessing need-supportive/thwarting behaviours. It was concluded that Japanese college students might perceive less need-supportive behaviours and more need-thwarting behaviours than Canadian college students, although the possibility of a response bias caused by Japanese students' reluctance to give extreme scores cannot be discarded. Also, need-supportive/thwarting behaviours had a more independent effect in the Japanese sample than in the Canadian sample.

**Table 1.** Correlation of IBQ with other scales

IBQ subscales	Need satisfaction			Need frustration			SWLS	Well-being & Ill-being		
	Autonomy	Competence	Relatedness	Autonomy	Competence	Relatedness		PA	NA	Depression
1. Autonomy support	.33 ***	.20 **	.49 ***	-.19 *	-.24 **	-.29 ***	.39 ***	.25 ***	-.07	-.16 *
2. Autonomy thwarting	-.08	.07	-.15 *	.19 *	.17 *	.39 ***	-.25 ***	.06	.24 ***	.24 **
3. Competence support	.37 ***	.31 ***	.52 **	-.12	-.16 *	-.17 *	.41 ***	.30 ***	.01	-.07
4. Competence thwarting	-.04	-.01	-.14 †	.11	.24 **	.32 ***	-.28 ***	-.03	.10	.20 **
5. Relatedness support	.42 ***	.44 ***	.59 ***	-.24 ***	-.33 ***	-.33 ***	.48 ***	.31 ***	-.09	-.16 *
6. Relatedness thwarting	-.23 **	-.18 *	-.45 ***	.29 ***	.35 ***	.41 ***	-.45 ***	-.18 *	.23 **	.31 ***

† $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

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## Developing a 24 items' Short-form of Learning-related Achievement Emotions Questionnaire (SF-L-AEQ) in Chinese Students

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**Keywords:** instrument development, achievement emotions, SF-L-AEQ, Chinese students

*Background:* While it may have been widely recognized that positivity in daily life can increase the individuals' emotional well-being, less attention has been put to positivity in the learning process of students. From a perspective of emotions in education, Pekrun [2006] posited that students may experience discrete positive and negative emotions (e.g., enjoyment, hope, anxiety, boredom, hopelessness) in a range of achievement settings (e.g., learning-, class- and test- related). To assess students' achievement emotions in the three settings, Pekrun and his colleagues developed the Achievement Emotions Questionnaire [AEQ, 232 items, see Pekrun, Goetz, Frenzel, Barchfeld, & Perry, 2011]. However, the length of the AEQ, to a large extent may limit its feasibility in use with other measures to test the control-value conceptual model of achievement emotion. In addition, the AEQ was originally developed in Western university students.

*Aim:* This study aimed to not only extend prior AEQ research to Chinese secondary students, but also took a focus on developing a short form of the domain of learning related achievement emotions (L-AEQ) with a large sample of Chinese secondary students (N = 8759) from three regions of China (Southern, Southwest, and East).

*Method:* Two survey studies were conducted. The first study tested the full version (75 items) with a sample of 970 students and developed a short form with 24 items to assess learning-related emotions. The second study tested this short form with a sample of 7789 students. Reliability and validity of the SF-L-AEQ to assess positive and negative emotions were tested and compared to the two facets in the full version in the first study. Reliability and validity of the SF-L-AEQ were tested by using a large sample size in study 2.

*Results:* The SF-L-AEQ showed similarly good reliability and model fit indices as compared to the full version. The replication by using a large sample size of students in study 2 supported what was found with the SF-L-AEQ in study 1.

*Conclusions:* The 24 items' of short-form of learning-related achievement emotions questionnaire (SF-L-AEQ), compared to the original 75 items' L-AEQ, can be used as a parsimonious screening tool to assess students' positive and negative emotions in learning situations to cater for students' emotional needs. For future studies, other control and value variables can also be added with the SF-L-AEQ to test the control-value conceptual model of emotions in a comprehensive way.

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## Designing Learning Workshop to Increase Subjective Well-being Based Upon Two Contrastive Action Principles with Money: Profit-Maximization, Appreciation-Maximization and Their Balance

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**Keywords:** workshop, subjective well-being, action principle, profit-maximization, appreciation-maximization

*Background:* The different action principles to use money on markets drastically affect subjective well-being of market participants [1][2], rather than their incomes and income distributions that were conventionally main target of study [3][4] about correlation with money and happiness. The authors developed and validated a model of learning workshop which makes participants think and feel two contrastive action principles on money and economy [5][6].

*Aim:* The authors expanded this learning workshop [7][8] for participants to provide a co-creative [9] opportunity of group learning to observe optimal balance between the two different views on money-related norms, the profit maximizing principle [10] and the appreciations maximizing principle [11] [12] that may change contrastively peoples' behaviors in markets and influence their subjective well-beings. They validated the expanded model by verifying quantitatively the effects of money games [13] on subjective well-being.

*Method:* A group-leaning workshop is composed by three money-game sessions evenly divided as time: the first session is only on action principle for profit maximizing that an administrator instructs participants use their money and behaved for profit maximizing; the second is to include the action principle for appreciations maximizing that an administrator instructs participants use their money and behaved for maximizing their appreciations. All resources distributed to participants and rules applied to the games are set equal among these two sessions except for these contrastive principles about market behaviors. In either session, participants are divided to 4-8 stores having their own parts of an ornament and money. Each stores trade money to gather 2-4 other different parts, depending on the number of participants, for assembling and selling them to an administrator. The authors implemented 4 workshops in Japan from July 2017 to December 2017. They measured quantitatively par-

ticipants' changes in subjective well-beings before and after of each session by four factors of happiness [14], the satisfaction with life scale (SWLS) [15] and Japanese version of PANAS (JPANAS) [16].

*Results:* The results of workshop showed that the learning experiences in each session significantly affected augment of subjective well-being. Among sessions, the mixed session simultaneously experiencing two action principles significantly contributed to increase subjective well-being of participants.

*Conclusions:* This study successfully designed the expanded model of learning workshop which makes participants consider two contrastive action principles on money and their balance, and it evaluated quantitatively how workshop positively affected changes in participants' well-being.

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## The Effects of Gratitude and Indebtedness on the Reciprocity Towards Friends in Japan

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**Keywords:** gratitude, indebtedness, reciprocity, cyber ball game

*Background:* When receiving help, people tend to feel an emotional gratitude or emotional indebtedness. These emotions occur in a similar situation but do not occur at the same time [1]. Previous studies showed that emotional gratitude and emotional indebtedness promote reciprocity [2, 3]. Although the said studies revealed the differences between gratitude and indebtedness, and the links between these emotions and reciprocity, these studies, however, did not consider the cultural difference. Some studies on gratitude in Japan showed that Japanese university students feel both emotional gratitude and indebtedness at the same time after receiving help [4]. This leads us to ask: If a person feels both emotions at the same time, then which emotion promotes reciprocity?

*Aim:* We seek to elucidate the effects of both emotional gratitude and emotional indebtedness on reciprocity towards benefactors. An experiment was conducted to validate these hypotheses: participants in the gratitude condition and the indebtedness condition want to be more helpful to a benefactor than the participants in the neutral condition. Furthermore, participants in the indebtedness condition want to be more helpful to than the gratitude condition.

*Method:* Participants (N=45) joined the experiment with their friend, and they were randomly assigned to each of the three conditions. They recalled some gratitude/indebtedness/chit chatting scenes caused by their friend for three minutes. They answered the survey about their emotions [4]. Then, they played a cyber ball game [5] with four people in which they were told “a communication game with another pair”. Actually, “another pair” and their friend in the game were a computer program. The cyber ball game was independent between the participants. However, they were made to believe that they joined the same game and their friend was excluded. After that, they answered the surveys about the prosocial intentionality towards each player and their friend.

*Results:* Manipulation check was successful. To test the hypothesis, we submitted prosocial intentionality towards their friend scores (width from 1 to 4) to a 2×2 (Conditions × Participant Genders) ANOVA. A main effect of conditions emerged ( $F(2, 39)=3.72, p=.03, \eta^2=.19$ ); participants in indebtedness Condition ( $M=3.78, SE=0.08$ ) wanted to be marginally significantly more helpful to their friend than gratitude ( $M=3.52, SE=0.07, p=.05, d=.89$ ) and neutral conditions ( $M=3.54, SE=0.07, p=.08, d=.81$ ). A main effect of participant genders also emerged ( $F(1, 39)=8.61, p=.01, \eta^2=.22$ ); female ( $M=3.74, SE=0.05$ ) significantly wants to be more helpful to their friend than male ( $M=3.49, SE=.07$ ). Lastly, no interaction was present.

*Conclusions:* Hypotheses were partly supported. The emotional indebtedness facilitated the prosocial intentionality, but the emotional gratitude did not. This study proved that indebtedness promote a reciprocity than gratitude in Japan.

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## Why Females Feel Happier and More Depressed at the Same Time: A Study Among Chinese Undergraduates

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**Keywords:** Happiness, depression, personality, gender, Chinese

Studies in the past have found that gender plays an important role in happiness (Kelley & Stack, 2000; Alesina, Di Tella & MacCulloch, 2004). This study examines gender difference in happiness and depression in Chinese society, with regard to the Five Factor Model (FFM). Totally, 5648 students (aged between 17 and 29) were recruited from universities in China. Results indicated that females reported higher happiness and higher depression than males. The present study provides empirical data that females tend to express more emotional feelings, like gratitude and happiness (Becker & Smenner, 1986; Gordon et al., 2004). Moreover, results showed that extraversion mediated females' experience of subjective happiness and depression whereas neuroticism mediated females' experience of depression. The results of the present study reconfirmed that extraversion was the most reliable predictor of positive affect (e.g., happiness) while neuroticism was the most reliable predictor of negative affect (e.g., depression) (DeNeve & Cooper, 1998).

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## Evaluation of the Slovene version of the Mental Health Continuum – Short Form: A Cognitive Interview Study

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**Keywords:** construct validity, qualitative testing, cognitive interviews, Mental Health Continuum – Short Form

*Background:* Translation and adaptation of measurement instruments to a new language poses several challenges to researchers, including the consideration of semantic and cultural specificities of the target language. Classical psychometric techniques, such as factor analysis and item response theory, can detect problems related to construct and measurement validity but are unable to identify sources of these problems. Therefore, quantitative techniques can be meaningfully complemented by qualitative methods that allow for the examination of the validity of the translated items and scales taking into account participants' language and cultural context. Among such methods, cognitive interviewing can be used to examine mental processes associated with understanding and answering specific items [1].

*Aim:* The aim of the present study was to qualitatively investigate construct validity of the Slovene translation of the Mental Health Continuum – Short Form MHC-SF [2] using cognitive interviewing technique. Our goal was to detect possible problems in the understanding of instructions and specific items and in the use of response scale, and to propose improvements in the translation accordingly.

*Method:* The study included 30 participants varying in gender, age, and education. Each participant was interviewed individually using the cognitive interviewing method to examine understanding of the 14 MHC-SF items in-depth. A concurrent approach with a combination of think aloud and probing techniques was adopted. First, a participant was asked to verbalize his or her thoughts while answering each item. Then an interviewer probed a participant about specific themes pertaining to each item.

*Results:* A thorough revision and analysis of the transcribed interviews revealed a considerable consistency among participants in the understanding and interpretation of most of the items. However, specific problems related to the understanding of vague concepts such as “community” and “society” and to the length and complexity of some items were also identified. In addition, cognitive interviews revealed difficulties that several participants had with using Likert-type response scale with very specific category labels. Finally, the reference period of the past month was interpreted in various ways, with some participants referring to the past calendar month and some to the past 30 days. Participants were also consulted regarding the possible modification in the translation of the most problematic items.

*Conclusions:* The obtained findings provide insight into the major problematic aspects of the Slovene translation of the MHC-SF items and offer guidelines for the improvement of these items. Altogether, the findings confirmed the importance of cognitive interviewing in identifying problems regarding understanding and answering questionnaire items. The method can be effectively used in construct validation of scales as a complement to more commonly used quantitative techniques.

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## **Personality – Basic Traits and Individualism or Collectivism Self-Beliefs – as Self-Efficacy Predictors in Three Periods of Life**

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**Keywords:** Self-efficacy, Big-Five, Horizontal and Vertical Individualism or Collectivism self-beliefs

*Background:* Self-efficacy is an important construct in socio-cognitive personality and positive psychology. Beliefs in Self-efficacy facilitate control over own life, achieving challenging goals, mastery motivation, optimism and engagement, resilience in coping with stress. It changes in the course of the lifespan [1]. Self-efficacy is linked to personality traits and self-beliefs. Relationships between it and Individualism or Collectivism as self-beliefs have been not analyzed yet. It seems important in countries like Poland located "in between individualism and collectivism" [2].

*Aim:* The present study examined the contribution of Big-Five traits and four dimensions of self-construal – Horizontal and Vertical Individualism (HI, VI) or Collectivism (HC, VC) as individual beliefs – in predicting Self-efficacy, as well as significant predictors of Self-efficacy in groups representing three periods of life.

*Method:* Adolescents (N=215, 35% men, 13-18yo), emerging adults (N=254, 45% men, 19-24yo), and middle-aged adults (N=252, 54% men, 40-55yo) completed the NEO-FFI, General Self-Efficacy Scale, Horizontal and Vertical Individualism and Collectivism Questionnaire.

*Results:* Three groups differed in all variables, thus hierarchical regression analyses were done separately in each group. Self-efficacy was predicted to a higher degree among adolescents than emerging and middle-aged adults (respectively traits predicted 41.1%, 20.8% and 7.2%, self-beliefs – 6.3%, 7.2% and 15.1%). Among adolescents it was predicted by 4 traits (excluding Openness) and Horizontal (HI, HC) beliefs, among emerging adults by Neuroticism, Extraversion and Openness and two beliefs (VI and HC), among middle-aged adults by Openness and Conscientiousness, positively by Individualistic and negatively by Collectivistic beliefs.

*Conclusions:* Self-efficacy is better predicted by examined personality factors among adolescents than adults. In older groups the role of basic traits in predicting it is lower and the role of self-beliefs - is higher.

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## Parent-child Attachment and Gratitude in Children

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**Keywords:** gratitude, socialization, children, attachment security

*Background:* Attachment may play a role in developing virtues such as gratitude [1]. Specifically, cultivating attachment security and gratitude likely occurs through similar relational patterns where individuals benefit from supportive others [1]. Although studies show that securely attached adults report higher levels of gratitude [1,2], little research has examined links between children's attachment and gratitude. Yet, it is important to explore this association as gratitude may help children broaden and build by promoting healthy relationships and well-being [3].

*Aim:* The goal of this project was to examine the association between children's attachment and multiple indices of children's gratitude.

*Method:* Ninety-five mother-child dyads (children aged 7-12,  $M=8.79$ ; 44% female) completed in-person surveys and a 5-minute discussion task on gratitude. Children reported on their attachment security with their mother using the Kern's Security Scale [4]. Three indices of children's gratitude are analyzed. First, children reported on their own gratitude using the Positive Events and Responses Survey assessing their likelihood to feel grateful in response to 5 hypothetical positive events [5]. Second, children's definition of gratitude was coded during the discussion task. Finally, children reported on how important they thought gratitude was using a 7-point Likert scale.

*Results:* Multiple regression analyses were conducted with children's age, sex, and mother's warmth entered as covariates. With children's importance of gratitude as the dependent variable, the full model was significant,  $F(4,89)=2.84, p=.03$ , showing that children reporting more secure attachment rated gratitude as more important ( $\beta=.30, t=2.88, p=.005$ ) above and beyond covariates. Next, with children's likelihood to feel gratitude, the full model was marginally significant,  $F(4,88)=2.05, p=.09$ , and indicated that children's security predicted higher levels of gratitude ( $\beta=.29, t=2.70, p=.008$ ), controlling for covariates. Finally, with children's definitions of gratitude, the full model was significant,  $F(4,89)=3.43, p=.01$ , but, children's security only marginally predicted more accurate definitions of gratitude ( $\beta=.18, t=1.74, p=.09$ ).

*Conclusions:* By showing that children's attachment security was positively associated with a range of gratitude indices, this study offers novel contributions to the literature. These are important findings because research shows gratitude is associated with many positive outcomes for youth, such as higher levels of well-being [6] and increased prosocial behaviors [7]. A secure attachment may help children recognize gratitude's importance, consistent with research showing more secure children have better emotion understanding [8]. However,

longitudinal work is needed to examine the bidirectional association between attachment and gratitude, given that gratitude also may strengthen relationships, consistent with find, remind, and bind theory [9].

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## Cross culture: Flourishing of Generation Y in Turkey and Indonesia

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**Keywords:** flourishing, gen Y, cross culture, Indonesia, Turkey

*Background:* Generation Y / Echo Boomers / Millennials is a techno-generation who was born from 1982 to 1994. They will be the key point in the future. Citizen well-being of Generation Y are crucial to governance as indicator of success. Quality human resources is needed to compete in competitive globalization. Flourishing is a life experience that goes well, a combination of good feeling and function effectively as a human [1] so that will develop themselves to excel and comfortable with life. Developing countries like Turkey and Indonesia need to develop flourishing in their young generation to compete for globalization. Jakarta and Istanbul are metropolitan cities. Both countries have similarities in religion, dominant Muslims.

*Aims:* The main objectives of the research were (1) to measure the degree of generation of Y flourishing in Turkey and Indonesia (2) to map the 5 pillars of the generation Y flourishing in Turkey and Indonesia .

*Methods:* PERMA-Profler (15 item) with 5 pillars: Positive Emotion, Engagement, Relationship, Meaning, Accomplishment, also added 8 items from Negative Emotion, Health, Loneliness, Happiness. This study also used demographic variables (gender, education, marital status, occupational, income). Participants in this study were Gen Y who was domiciles in Jakarta (N = 339) and in Istanbul (N = 290).

*Result:* The results of the factor analysis confirmed that PERMA was a factor. Gen Y in Jakarta with mean of overall well-being = 5.77 with Cronbach's  $\alpha$  was 0.857 (Positive Emotion = 7.10; Engagement = 6.92, Relationship = 7.53; Meaning = 7.47; Accomplishment = 7.06; Negative Emotion = 5.88); Health = 7.11; Loneliness = 4.83; and happiness = 8.03), and the data show 28% experience flourishing. Gen Y in Istanbul with mean of overall well-being = 7.01 with Cronbach's  $\alpha$  was 0.845 (Positive Emotion = 7.54; Engagement = 7.32, Relationship = 7.50; Meaning = 5.77; Accomplishment = 7.40; Negative Emotion = 7.20); Health = 5.93; Loneliness = 2.51; and happiness = 2.50) and the data show 10% experience flourishing. The overall well-being there is no significant difference. There is a significant difference ( $p < 0.05$ ) between Gen Y in Istanbul and Jakarta, ie Meaning, Negative Emotion, Health, Loneliness, and Happiness. In the Gen Y demographic data onto Jakarta there is no difference in gender, education, occupational, marital status (there is no difference between singles and married but in widower / divorce has a lower mean value), and income level (however, the highest mean on income between 15-25 million). In Gen Y demographic data onto Istanbul there is no difference in gender, education, occupational (but housewife has the highest mean than working subjects), marital status and income / income level.

*Conclusion:* Overall well-being there is no difference between Gen Y in Jakarta and Istanbul, but Meaning on Gen Y in Turkey is lower, This needs to be deepened in terms of culture in Turkey as both countries shares the same dominant religious values. There are interesting to find in Turkey, low loneliness, but the happiness is also low, whether it is related to the meaning that is also not high need more elaborated on qualitative research. The flourishing results of both countries are still low, positive psychology-based programs need to be developed in both countries.

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